



cpws The Centre
For Pharmacy
Workforce Studies

Division of Pharmacy and Optometry, The University of Manchester

Evaluation of Newly Qualified Pharmacist Pathway

Final report

October 2023

Evaluation of Newly Qualified Pharmacist Pathway

Final report

A report submitted by the Centre for Pharmacy Workforce Studies
(University of Manchester) and ICF Consulting Services Limited

October 2023

Authors:

Imelda McDermott, Tia Lata-Burston, Ellen Schafheutle, Sarah Willis (CPWS)

Aidan Moss, Katie Robinson, Heather Rose (ICF)

Table of Contents

Executive Summary	iii
Acknowledgements	v
1 Introduction	6
1.1 Background	6
1.2 Aims of the evaluation.....	7
1.3 Challenges in transition to independent practice	8
2 Design and methodology	9
3 Findings from the learner survey.....	11
3.1 GPhC Registration.....	12
3.2 Current employment	13
3.3 Foundation Training.....	14
3.4 Learning Programmes	16
3.4.1 Participation in the learning programmes	16
3.4.2 Motivations for enrolling on the learning programmes	17
3.4.3 Learning Platforms.....	20
3.4.4 Support and supervision	21
3.4.5 Learning activities	23
4 Findings from qualitative interviews	24
4.1 Purpose and benefits of the learning programmes.....	24
4.2 Resources	28
4.3 Supervision.....	30
4.3.1 Role of supervisors	30
4.3.2 Learners' views on access, content and quality of supervision.....	33
4.3.3 Supervisors' views on quality supervision	34
4.3.4 Training and support for supervisors.....	35
4.4 Reflective practice	38
4.5 Workplace-based assessment	39
4.6 Challenges in completing the learning programme	42
4.7 Non-engaged learners	44
5 Integrated summary of findings.....	46
6 Discussion	51
7 Recommendations.....	54
8 References	55

Executive Summary

Background

This report presents the findings from an impact and process evaluation of the Newly Qualified Pharmacist Pathway for those pharmacists who joined the General Pharmaceutical Council (GPhC) register in 2021 and 2022. The evaluation was initially commissioned by Health Education England (now part of NHS England Workforce Training and Education Directorate) to assess the clarity of **purpose and benefits** of the Pathway for learners, supervisors and employers, the added value of the Pathway and **varied resources**, including the quality of and support for **supervision**, opportunities to apply learning across varied pharmacy workplaces. Insights from the evaluation can help inform the future development of the Pathway and provide evidence to inform the development of a learning culture across different sectors, that is fit to support early career pharmacists when they begin to enter the profession as 'prescriber-ready' from 2026. The Pathway was designed to be flexible and adaptable to the individual needs of newly qualified pharmacists, focusing on four elements: Working toward the **same learning outcomes** (which is the RPS post-registration foundation pharmacy curriculum); **access to the RPS e-portfolio, access to a suite of learning resources, and access to supervision**, which varied across different settings/sectors. **In community pharmacy (except Boots), general practice, community health services, health and justice, and care homes**, the Centre for Pharmacy Postgraduate Education (CPPE) Newly Qualified Pharmacist Programme, an NHSE-funded 12-month structured learning programme, took a blended learning approach and learners were allocated a designated, remote CPPE educational supervisor. Hospitals offered clinical diplomas delivered by universities or in-house training programmes, with the Pathway intended to complement existing training programmes and supervision provided in the workplace. The **Boots UK** Newly Qualified Pharmacist Programme was accredited by the RPS and offered to Boots-employed community pharmacists. Boots learners were assigned to in-house Health Academy Trainers.

Methodology

The evaluation design and methodology were developed using **Normalisation Process Theory** (NPT), focusing on the factors that promote or inhibit Pathway implementation and integration into routine work. We used a mixed-methods approach combining a survey of newly qualified pharmacists (n=94) with semi-structured interviews with newly qualified pharmacists (n=7) and supervisors/employers (n=14) on the hospital and CPPE pathways only. We also interviewed three newly qualified pharmacists who did not participate in any of the available Pathways to understand the reasons behind non-engagement.

Key findings

Awareness of the Pathway varied in different settings. Those newly qualified pharmacists in community pharmacies who knew about the CPPE Programme did so from the CPPE website or mailing list (if they had signed up for it). In most hospitals, clinical diplomas were part of the Pathway and a requirement to progress to Band 7. Enrolled learners and supervisors had a coherent understanding of **the purpose and benefits of the learning programmes (i.e. CPPE Newly Qualified Pharmacist Programme and hospital learning programmes)**. These learning programmes were viewed as providing newly qualified pharmacists **access to supervisors** who can support them in navigating their transition from the foundation period to becoming independent practitioners. In hospitals, learners were assigned an educational supervisor and a rotational/practice supervisor; both were workplace-based. Those on the CPPE programme were allocated a CPPE educational supervisor, whom they met remotely and whose support they valued. The role of educational supervisors included supporting learners in identifying their learning needs, developing a personal development plan, completing end-of-module reviews and conducting supervised learning

events/workplace-based assessments. Rotational/practice supervisors in hospitals tended to be clinicians or specialists in the specific area of practice of the rotation whose role was to support and observe the learner's day-to-day clinical practice.

The Pathway was **non-mandatory, and as a result, it lacked legitimacy in ensuring that the Pathway should be part of newly qualified pharmacists' routine work across all settings/sectors.** In most hospitals, clinical diplomas or in-house hospital programmes were required for progression to Band 7. However, the CPPE programme was not mandatory, and awareness of the purpose was limited in community pharmacies and other settings/sectors eligible for the CPPE Pathway.

Quality of supervision varied across different settings/sectors. Hospital supervisors were expected to supervise after three years of practice, sometimes without training. CPPE supervisors received comprehensive training delivered by CPPE and had regular peer support. **Supervision will become more important as newly qualified pharmacists qualify as independent prescribers from 2026.** However, processes and infrastructure are lacking in pharmacy compared to other healthcare professions. Lack of clarity on the purpose of the Pathway, and recording evidence in the RPS e-portfolio specifically, was found to **hamper newly qualified pharmacists' ability to adopt reflective practice.** Some clinical diplomas had begun incorporating the RPS e-portfolio, creating a more seamless integration for learners. The presence of multiple resources and e-platforms without a clear differentiation of their purposes was experienced as overwhelming for some learners.

Lack of time was the main reason for non-engagement with the learning programmes, especially amongst those in community pharmacy. Learners in hospitals were given study leave to attend modules on clinical diplomas, while those in community pharmacies had to find the time outside of work hours to engage in CPPE modules and educational supervision. This inconsistency or lack of learning time can impact on equality and inclusion.

Key policy recommendations

1. Leadership is needed from the profession to clearly articulate the vision and purpose of the Newly Qualified Pharmacist Pathway and where this sits in the progression from novice to proficient and advanced practitioner. This is to ensure that learners, supervisors and employers understand the expectations of the Pathway. This vision should include a set of common objectives aligned with the needs of the profession and the NHS and be supported by a governance framework and accountability mechanisms.
2. It is important to articulate that newly qualified pharmacists should not be expected to be fully formed practitioners at the point of registration, just as in other professions. This is likely to be even more relevant from 2026, when pharmacists will qualify as independent prescribers at the point of registration. There needs to be a clear pathway for newly qualified pharmacists that prepare them for the next steps in their careers, including independent prescribing, advanced practice and credentialing.
3. Embed reflective practice and its evidencing into pharmacists' practice. This will help to create a culture of lifelong learning in the pharmacy profession, where pharmacists are supported by their employers and given protected learning time to integrate continuous development and learning into their work.
4. Implement a standardised e-portfolio across learning programmes to provide consistent benchmarks for all newly qualified pharmacists, regardless of the settings/sectors and the learning programmes.
5. Develop a national framework for educational supervision in pharmacy that provides guidance on best practices, outlines the roles and responsibilities of supervisors, and aligns with the needs of newly qualified pharmacists. The framework should also include establishing and maintaining effective peer support networks.

Acknowledgements

We would like to thank NHS England Workforce Training and Education Directorate for commissioning and funding this research.

We would also like to thank those who participated in the early key informant interviews and the stakeholder engagement, which helped to inform the research and recommendations.

We are very grateful to the Centre for Pharmacy Postgraduate Education (CPPE) for supporting our survey distribution and recruitment for interviews.

We would like to thank Lauren Blum at ICF for her contribution to the project.

A special thank you goes to the learners and supervisors who generously gave their time to complete the survey and participate in interviews.

1 Introduction

1.1 Background

Pharmacists are playing an increasingly important role in healthcare. They are now more involved in clinical care and patient-facing roles than ever before. This is due to rapid changes in healthcare and pharmacy practice and the growing demand in the NHS for clinical, patient-facing, accountable pharmacist practitioners across all sectors. To support pharmacists' evolving roles, in January 2021, the General Pharmaceutical Council (GPhC) published the revised Standards for the Initial Education and Training of Pharmacists (IET)(1). The IET reforms involve the following key changes:

- The fifth (pre-registration) year has become the foundation training year, with strengthened supervision for trainees, an increasing number of cross-sector clinical training posts and collaborative working between higher education institutions, statutory education bodies and employers.
- By 2026, the aim is for all pharmacists joining the register to be trained as prescribers and have a greater range of clinical capabilities.
- This reform will pave the way towards a more consistent training experience, with the same opportunities for trainees to develop their skills and knowledge across healthcare settings.

The new five-year IET programme is the first step to a more structured career pathway for pharmacists. It aims to enable pharmacists to progress from registration to advanced practice and potentially to consultant-level practice.

Following the Interim Foundation Pharmacist Programme 2020/21, which was developed in response to the COVID-19 pandemic, post-registration development is becoming more structured, with the aim of creating a continuum of learning and development from novice to higher levels of practice. This requires a unified approach to the development of post-registration pathways, including the development of standards, outcomes, curricula, and assessments.

Plans are being developed to make sure that the current workforce of pharmacists benefits from increased post-registration opportunities to train as independent prescribers, develop enhanced clinical skills, and have opportunities to practice using those skills. This requires collaborative working across the system to help meet current and future needs for trained clinical and prescribing pharmacists across primary care.

The Newly Qualified Pharmacist Pathway (hereafter referred to as the Pathway) aims to link the IET reforms to a continuum of post-registration practice. During the transition period while the IET reform is implemented, the Pathway will evolve to meet the needs of the social-and health-care system by providing a flexible developmental structure that will allow early careers pharmacists to adjust to the demands of professional practice, develop clinical reasoning and decision-making skills, progress leadership and educational behaviours, apply learning into complex and changing clinical environments and embed research into clinical practice.

The introduction of the Pathway was a profession-wide cultural and educational intervention in England, which will have an impact on every pharmacy organisation and the pharmacy workforce. The Pathway was designed for newly qualified pharmacists to help them meet their development needs and make the transition to more independent learning.

The non-mandatory 12-month learner-led programme acts as a bridge towards enhanced and advanced practice.

The Pathway recognises that newly qualified pharmacists have different career goals and experiences. Hence, it was designed to be flexible and adaptable to the individual needs of newly qualified pharmacists, focusing on four elements:

1. Everyone working toward the same learning outcomes, which is the RPS post-registration foundation pharmacy curriculum(2)
2. Access to the RPS e-portfolio(3), which provides support for learners to assess their learning needs, develop an action plan and reflect upon their experiences. Access is available to all learners i.e. they do not need to be a member of the RPS to access the e-portfolio.
3. Access to a suite of learning resources(4) which are mapped against the new curriculum domains (communication and collaborative working, professional practice, leadership and management, education and research).
4. Access to supervision. This varied across different settings:
 - For newly qualified pharmacists in a patient-facing role in community pharmacy (except Boots), general practice¹, community health services, health and justice and care homes, the **Centre for Pharmacy Postgraduate Education (CPPE) Newly Qualified Pharmacist Programme** was fully funded by NHS England. The 12-month structured learning programme took a blended learning approach, combining online learning, workshops and assessments. Learners were allocated a designated CPPE education supervisor, who will review progress in practice and provide feedback and support.
 - For newly qualified pharmacists in hospitals, these organisations offered **clinical diplomas delivered by universities or in-house training programmes**. The Pathway was intended to complement existing training programmes. Supervision was provided by supervisors based in the workplace.
 - For newly qualified community pharmacists working in Boots UK, the **Boots Newly Qualified Pharmacist Programme** was accredited by the RPS. It included a mix of e-learning, study days and self-directed study. Learners were assigned to in-house Health Academy Trainers who acted as a tutor to support them with supervised learning events.
 - NHS England funding was available to employers to support the supervision of newly qualified pharmacists in hospitals and Boots. There was a supervisor payment of £500 per learner for 10 hours of supervision throughout the year.

1.2 Aims of the evaluation

Health Education England (now part of NHS England Workforce Training and Education Directorate and hereafter referred to as NHSE) commissioned an **impact and process evaluation of the Pathway** for those pharmacists who joined the GPhC register in 2021 and 2022. We used Normalisation Process Theory (NPT) as a framework that addresses the factors needed for successful implementation and integration of the Pathway into routine work (normalisation)(5). The evaluation assessed the **clarity of purpose and benefits of the programme** for learners, supervisors and employers. In particular, we will

¹ Pharmacists who worked in posts which were funded via the Primary Care Network (PCN) additional roles reimbursement scheme were not eligible to apply as there was a separate programme for these pharmacists.

focus on the **added value of the Pathway**, and the varied **resources**, opportunities to apply learning across varied pharmacy workplaces, and the quality of **supervision** from a range of perspectives, including the support provided to supervisors. Through our analysis, we aim to better understand the **short-term benefits and likely long-term impacts** of the Pathway on both learners and employers and how to **improve the offer and ensure effective communication** to different sectors and newly qualified pharmacists across the diverse pharmacy workforce.

Following discussions with key stakeholders (RPS, CPPE, Boots, clinical diploma leads, and hospital in-house programme leads), the evaluation identified variations in NHSE funding streams and the level of support available for newly qualified pharmacists in hospitals across the country. Some areas had a strong focus on postgraduate (PG) diplomas, while others had a mix of in-house programmes, with some learning providers having their own e-learning platforms and not necessarily utilising the RPS e-portfolio. The remit of the evaluation was expanded to capture the variety of newly qualified pharmacists' training and development programmes that were available in NHS hospitals.

Findings from this evaluation will be used to inform the future development of the Pathway. The learning from the evaluation will also provide evidence to inform the development of a learning culture across different sectors that is fit to support early career pharmacists when they begin to enter the profession as 'prescriber ready' from 2026.

1.3 Challenges in transition to independent practice

Newly qualified healthcare professionals face many challenges during the transition to independent practice. Transition to practice is an under-researched area in pharmacy, but lessons can be learned from Magola et al.'s review of evidence on the transition experiences of novice doctors and nurses(6). Magola identified three main types of challenges experienced by novice doctors and nurses during the transition to independent practice. Personal challenges, such as fear, anxiety, stress and emotional labour, were found to be interdependent and varied according to personality, education history and work circumstances. There were social challenges, such as getting support and acceptance from colleagues and dealing with organisational culture, hierarchy, or interpersonal conflict. Lastly, there were job-related challenges, which included high workloads, complex tasks, staffing shortages, rotations, and shift patterns.

Although some of these challenges were applicable to newly qualified pharmacists, there were some pharmacy-specific challenges. Novice community pharmacists face other challenges, such as relationship management, lack of confidence, decision-making, being in charge and accountable and adapting to the workplace(7). Despite all of these challenges, novice pharmacists were expected to manage in the same way as more experienced pharmacists. This can be difficult, especially in community pharmacies where they often work in isolation.

Equality, diversity, and inclusion (EDI) is another important issue in pharmacy, although this issue is not limited to pharmacy(8). The GPhC survey of registered pharmacy professionals in 2010 found that pharmacy is a diverse profession, with 44% of pharmacists and 13% of pharmacy technicians coming from an ethnic minority background(9). Ethnic minority pharmacists reported lower perceptions of possible career success in hospital pharmacy and chose to work in single pharmacy and small group ownership. It was questionable whether self-employment is a positive choice ("pull") or due to labour market discrimination ("push")(10). There was also evidence of disproportionate treatment in the employment and outcomes of regulatory disciplinary of ethnic minority pharmacists in the UK, in terms of recruitment, progression, retention and in the regulatory disciplinary processes and outcomes(10). Despite women making up the majority of pharmacy

workers, there was a gender pay gap and underrepresentation of women from minority ethnic backgrounds in senior positions in the hospital sector(11).

From 2026, all newly qualified pharmacists will be independent prescribers from the day of registration. This will present some challenges for all newly qualified pharmacists, particularly those working in community pharmacies. Historically, ethnic minority pharmacists were less likely to achieve prescribing qualifications because they were more likely to work in community pharmacies, which traditionally provided less support for prescriber training than in hospital settings. General practice settings also offered a clearer Pathway to prescribing, but this was not the case for community pharmacists.

2 Design and methodology

The evaluation design and methodology were developed using Normalisation Process Theory (NPT)(5). NPT is a framework for evaluating complex interventions, focusing on the factors that promote or inhibit their implementation and integration into routine work. NPT also considers the sustainability of the intervention over time.

NPT considers four constructs that are essential for successful implementation:

- Coherence: This construct refers to the shared understanding of the Pathway among stakeholders.
- Cognitive participation: This construct refers to the engagement of stakeholders with the Pathway.
- Collective action: This construct refers to the work that stakeholders do to implement and maintain the Pathway.
- Reflexive monitoring: This construct refers to the ongoing evaluation and reflection on the implementation of the intervention.

NPT constructs were mapped against the evaluation themes (purpose, resources and supervision) and were used to inform the development of survey questionnaires and interview topic guides. The following table summarises the evaluation themes and the methods used to address the themes.

Table 2.1 Evaluation themes and research methods

Evaluation themes	Research method		
	Survey of newly qualified pharmacists	Interviews with newly qualified pharmacists	Interviews with supervisors/ employers
Purpose: learner view on clarity of purpose, benefits for learners, fit with other programmes	X	X	
Purpose: supervisor / employer views on fit, and added value			X
Resources: access by learners	X		
Resources: use, relevance, appropriateness	X	X	
Resources: barriers and facilitators to use		X	
Supervision: learner views on access, content, and quality		X	
Supervision: supervisor perspective on quality			X
Supervision: perceptions of educational culture in the workplace		X	X

We had also planned to analyse RPS e-portfolio access and usage data. However, as there were some errors and incomplete data in the dataset, and because the data consisted of every supervised learning event completed by each learner and not necessarily how they used the RPS e-portfolio, we could not analyse these data in a meaningful way.

We used a mixed-methods approach, combining a survey with semi-structured interviews.

The purpose of the survey was to capture information about learner characteristics, progress with the Pathway, characteristics of their workplace, supervisor relationships and their quality/value gained, application of learning, relevance, awareness and use of resources, changes in confidence, practice and other important outcomes. The surveys were hosted on the industry-standard, GDPR-compliant online platform Qualtrics. The surveys were anonymous and sent by the Centre for Pharmacy Postgraduate Education (CPPE), initially only to newly qualified pharmacists on the CPPE Newly Qualified Pharmacist Programme. In order to also capture those who may have been eligible but not signed up to a Pathway, CPPE later emailed all newly qualified pharmacists (defined as newly registered with the GPhC since August 2021) and who had signed up to their mailing list and agreed to be contacted for marketing and evaluation purposes. We also contacted all pharmacy schools in England and requested that they send the survey to postgraduate learners registered for Diploma courses on our behalf. The survey was open between 9th March 2023 and 18th May 2023. We received 94 responses.

We also conducted semi-structured interviews with learners, supervisors and non-engaged learners. The interviews were conducted via Teams and lasted approximately 30-45 minutes.

The purpose of learner interviews was to explore their views on the following aspects of the Pathway: purpose and benefits; added value; available resources; factors that facilitate or inhibit the use of resources; application of learning; and access, content, and quality of supervision. To recruit participants for the learner interviews, at the end of the learner survey, we asked those who were interested in participating in a follow-up interview to leave their contact details. We interviewed seven learners.

The purpose of the supervisors/employers' interviews was to explore their understanding of the purpose and benefits of the pathway, the resources available to learners, how supervision was conducted in practice and the short-term benefits and long-term impacts of the pathway on both learners and employers. An interview invite was distributed by CPPE to their educational supervisor and via pharmacy schools to supervisors for newly qualified pharmacist postgraduate Diploma learners. We interviewed 14 supervisors/employers.

We were unable to secure support from Boots to facilitate survey distribution or recruitment for interviews via their Pathway. Nevertheless, a small number of survey responses from Boots learners were gathered via other routes and are included in this report.

In addition, we interviewed three non-engaged learners i.e. newly qualified pharmacists, who did not participate in any of the available learning programmes. We wanted to understand the reasons behind their non-engagement. CPPE distributed the interview invitation to newly qualified pharmacists who were on their mailing list and agreed to be contacted for marketing and evaluation purposes. The invite was sent to those who had not engaged with the CPPE programme, started it but dropped out, or were on pause to contact the evaluation team if they were interested in participating.

This study received ethical approval from the University of Manchester by the Proportionate Review Committee (UREC ref no: Ref: 2023-15757-27368).

The illustrative quotes presented throughout the findings include a reference number that gives coded information pertaining to the interview participant in the format: [participant ID (L=learner, NEL=non-engaged learner, S=supervisor/employer), learning programme, main sector of work], for example (L01, CPPE, community pharmacy).

3 Findings from the learner survey

A total of 94 pharmacists completed the newly qualified pharmacists survey (100 had started, but six had not completed all responses). When asked how they described their gender, most respondents were female (n=69; 78.4% - valid percent). The largest number, yet less than half, of respondents were white (45.7%); followed by 33.3% Asian and 9.9% Black; see Table 3.1.

Table 3.1 Demographic Information (n=92)²

	Sex	N (%)
	Female	69 (78.4%)
	Male	19 (21.6%)
	Not known	1 (1.1%)
	Prefer not to answer	3 (3.3%)
	Ethnicity	
White	British	31 (33.7%)
	Gypsy or Irish Traveller	1 (1.1%)
	Other white background	5 (5.4%)
	Total: White	37 (45.7%)
Black	Black African	8 (8.7%)
	Total: Black	8 (9.9%)
Mixed	White and Asian	2 (2.2%)
	Other Mixed Background	1 (1.1%)
	Total: Mixed	3 (3.7%)
Asian	Indian	5 (5.4%)
	Pakistani	12 (13%)
	Bangladeshi	1 (1.1%)
	Chinese	7 (7.6%)
	Other Asian background	2 (2.2%)
	Total: Asian	27 (33.3%)
Arab	Arab	6 (6.5%)
	Total: Arab	6 (7.4%)
(Excluded)	Other	1 (1.1%)
	Prefer not to answer	10 (10.9%)
	Total: other or not known' – defined as missing	0%

3.1 GPhC Registration

The majority of respondents initially registered with the GPhC in 2021 (40.4%) or 2022 (48.9%); see Table 3.2.

² To allow for chi-square analysis, the demographic information relating to ethnic background was recoded into 5 categories as shown in the 'total' left column of the table below.

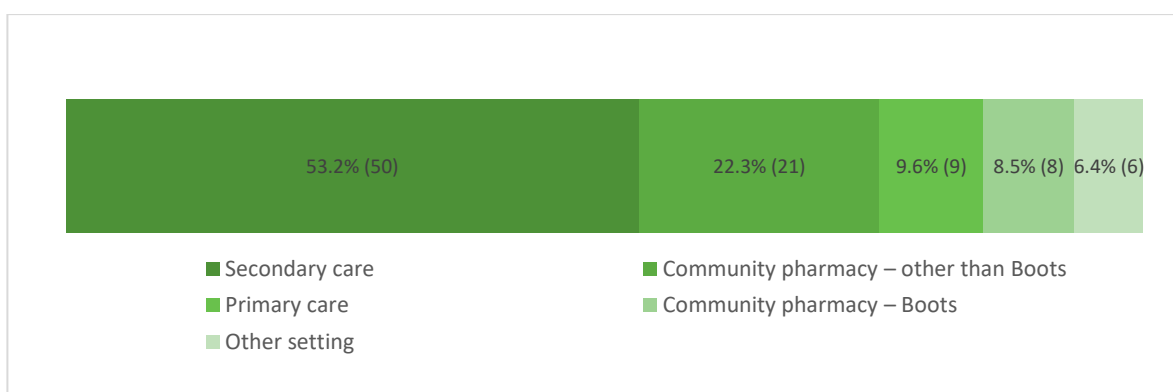
Table 3.2 When did you first register with the General Pharmaceutical Council (GPhC)? (Year) (n=94)³

Year	N (%)	Years	N (%)
2023	6 (6.4%)	2022-23	52 (55.3%)
2022	46 (48.9%)		
2021	38 (40.4%)	Before 2022	42 (44.7%)
2020	2 (2.2%)		
2018	1 (1.1%)		
2016	1 (1.1%)		

3.2 Current employment

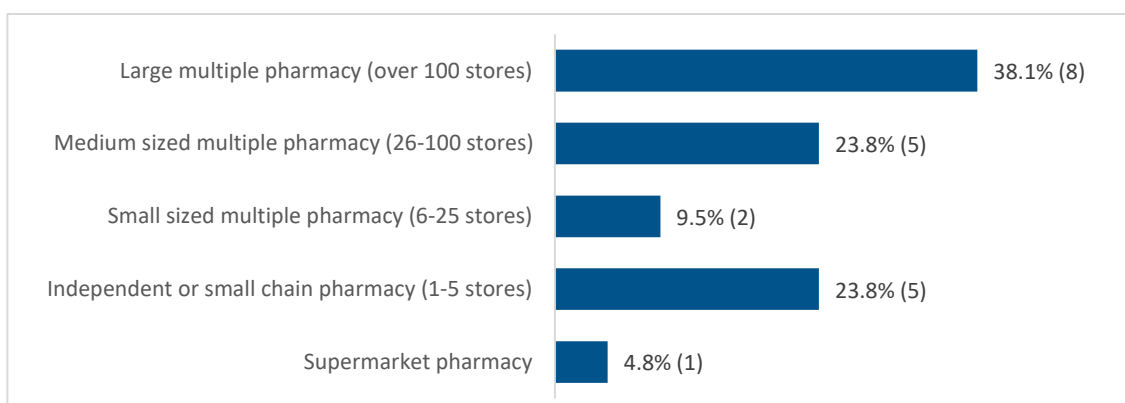
Survey respondents worked in a variety of different sectors, with the majority working in secondary care (n=50), community pharmacy (other than Boots) (n=21), and community pharmacy (Boots) (n=8); see Table 3.3.

Table 3.3 Which sector most closely corresponds to your current main job? (n= 94)



Those working in community pharmacies other than Boots were asked what size of pharmacy chain they worked for; see Table 3.4.

Table 3.4 What size is the pharmacy chain you work for? (n=21)



³ The GPhC registration year were recoded into two groups, one for those who first registered in 2022 or 2023 (i.e. on or after January 1st 2022), and another for those registered before 2022 as shown in the table.

Many newly qualified pharmacists currently employed in secondary care who responded to the survey were working in hospital pharmacies (n=48; 96%). Those working in 'other' secondary care settings (n=2; 4%) reported working in mental health organisations and NHS Foundation Trust. Nine respondents indicated they worked in primary care, with most employed in general practice (n=7; 77.8%). Those in other primary care organisations were currently employed in Primary Care Networks (n=2; 22.2%). No respondents indicated they worked in urgent care or care homes. 89.4% (n=84) of respondents were currently primarily working as employees (by NHS, community, GP etc.), and the remaining pharmacists were working as locums. Of the 94 respondents, 88.3% (n=83) worked full-time, and a smaller proportion, 11.7% (n=14), worked part-time. Fourteen (14.9%), had caring responsibilities for children, family members or other individuals.

Respondents to the survey were from across the country; however, most respondents (n=41, 43.6%) worked within the north of England; see Table 3.5.

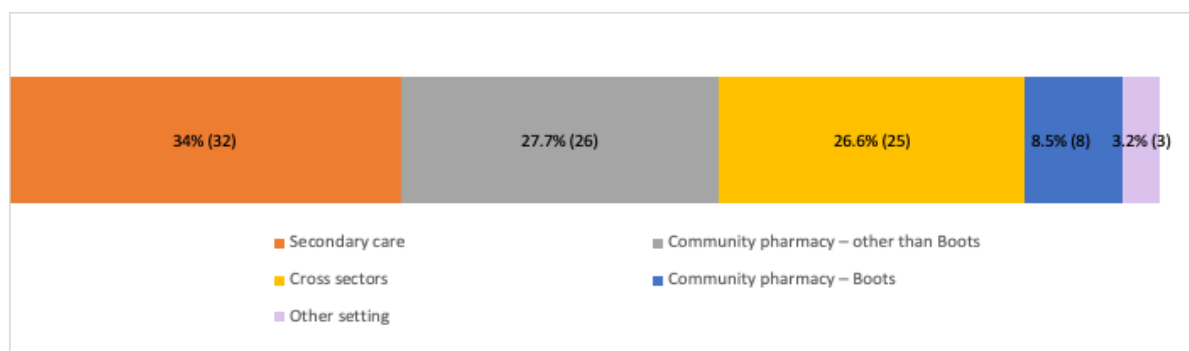
Table 3.5 What region do you work in? (n=94)

Region	N(%)
North East and Yorkshire	21 (22.3%)
North West	20 (21.3%)
Midlands	15 (16%)
East of England	7 (7.4%)
London	15 (16%)
South East	14 (14.9%)
South West	7 (7.4%)
I don't know	7 (7.4%)

3.3 Foundation Training

Respondents were asked which sector they completed their pre-registration foundation training in; the majority (34%) stated that they completed this in secondary care. Similar proportions of respondents completed their foundation training in community pharmacy and secondary care, slightly fewer completed this in a cross-sector environment, and 3.2% completed their training in alternate forms or this training was not applicable as they completed EEA/EU pharmacist training schemes; see Table 3.6

Table 3.6 Which sector most closely responds to where you completed your foundation training? (n=94)



To assess whether respondents stayed within the sector where they trained, or if they moved, a cross-tabulation was run between where respondents completed their foundation training and their current sector of work, as shown in Table 3.7.

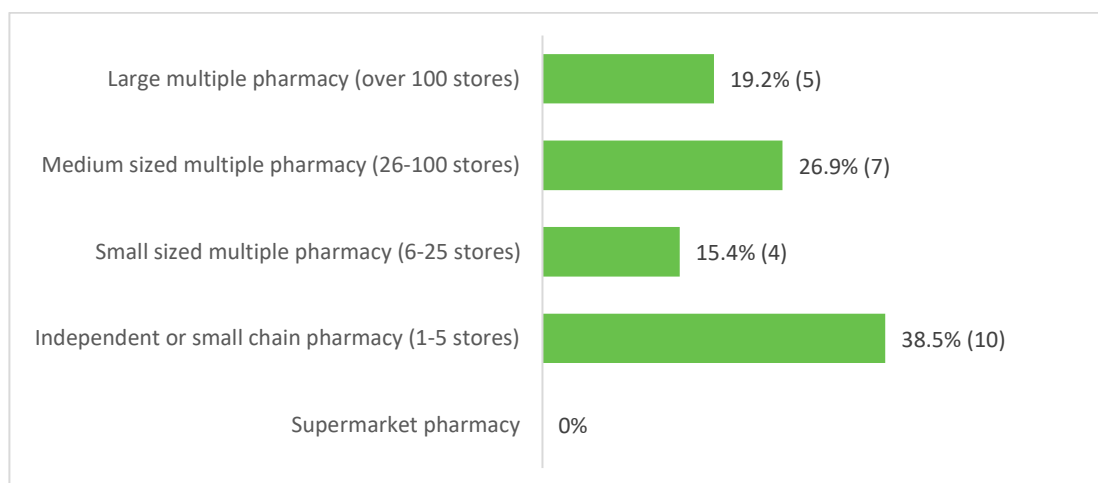
Table 3.7 Cross-tabulation of the sector where foundation training was completed and current sector of work (n=88)

		Sector where foundation training completed					
% (N) Yes		Community pharmacy – Boots	Community pharmacy- other than Boots	Secondary care	Cross sector	Other setting	Total
Sector where you currently work	Community pharmacy - Boots	57.1% (4)	8.7% (2)	0.0% (0)	8.3% (2)	0.0% (0)	9.1% (8)
	Community pharmacy – other than Boots	28.6% (2)	73.9% (17)	0.0% (0)	4.2% (1)	50.0% (1)	23.9% (21)
	Secondary Care	14.3% (1)	8.7% (2)	96.9% (31)	66.7% (16)	0.0% (0)	56.8% (50)
	Primary Care	0.0% (0)	8.7% (2)	3.1% (1)	20.8% (5)	50.0% (1)	10.2% (9)

Over a quarter of those who completed their foundation training in Boots now worked in a community pharmacy other than Boots. A high proportion of those who completed foundation training in secondary care remained. Those completing cross-sector placements mainly now work within secondary care (66.7%).

For those completing their foundation training within community pharmacy, they were asked to state the size of the pharmacy they worked for; see Table 3.8.

Table 3.8 Size of community pharmacy where newly qualified pharmacists completed their foundation training



Almost all individuals (96.9%) who had completed their foundation year in secondary care subsequently worked within hospital pharmacy. Those who had trained as part of cross-sector placements worked in primary care (e.g. GP) and community, secondary care (e.g.

hospital/mental health) and community, secondary and primary (e.g. hospital and GP), independent, and hospital/CCG.

3.4 Learning Programmes

3.4.1 Participation in the learning programmes

Participants were asked to indicate the learning programmes they had engaged with by ticking all that applied. The question used to assess the learning programmes that respondents had engaged with allowed for multiple Pathways to be chosen. However, this was an error as it was only possible for each learner to complete one of the Pathways. To correct for those who selected multiple programmes (e.g., ‘Any postgraduate diploma delivered by a UK university’ and ‘CPPE Newly Qualified Pharmacy Programme’), their responses were assigned to the sector-specific option (e.g., Diploma if they worked in Hospital), for analysis. One response also had to be excluded as they had stated both CPPE and Diploma as their learning programmes but worked within the community pharmacy sector, making it impossible to determine their current Pathway; see Table 3.9

Table 3.9 Which of the following learning programmes which form part of the Newly Qualified Pharmacists Pathway are you taking part in/have you taken part in since 2020? (n=66)

Learning programmes	N(%)
A postgraduate diploma delivered by a UK university	37 (56.1%)
CPPE Newly Qualified Pharmacy Programme	24 (36.4%)
Boots Healthcare Academy Newly Qualified Pharmacist Programme	5 (7.6%)

To understand the key differences between the learning programmes, many cross-tabulations were run. When asked whether they were given any protected study time to complete their learning programme(s), of 73 respondents; 35.6% were given protected study time, though 63% were not; one respondent did not know whether they were given this time or not. We assessed those learners who were given study time based on the learning programmes; see Table 3.10.

Table 3.10 Cross-tabulation between yes/no study time and learning programme (n=65)

% (N) Yes	CPPE Newly Qualified Pharmacy Programme	Any postgraduate diploma delivered by a UK university	Boots Healthcare Academy newly qualified pharmacist programme	Total
Are you given any protected study time to complete the learning programme?	25.0% (6)	44.4% (16)	20.0% (1)	35.4% (23)

Learners on each programme were from a range of ethnic backgrounds. Cross-tabulation showed no significant differences between race/ethnicity and learning programme; see Table 3.11.

Table 3.11 Cross-tabulation of race/ethnicity and learning programme (n=55)

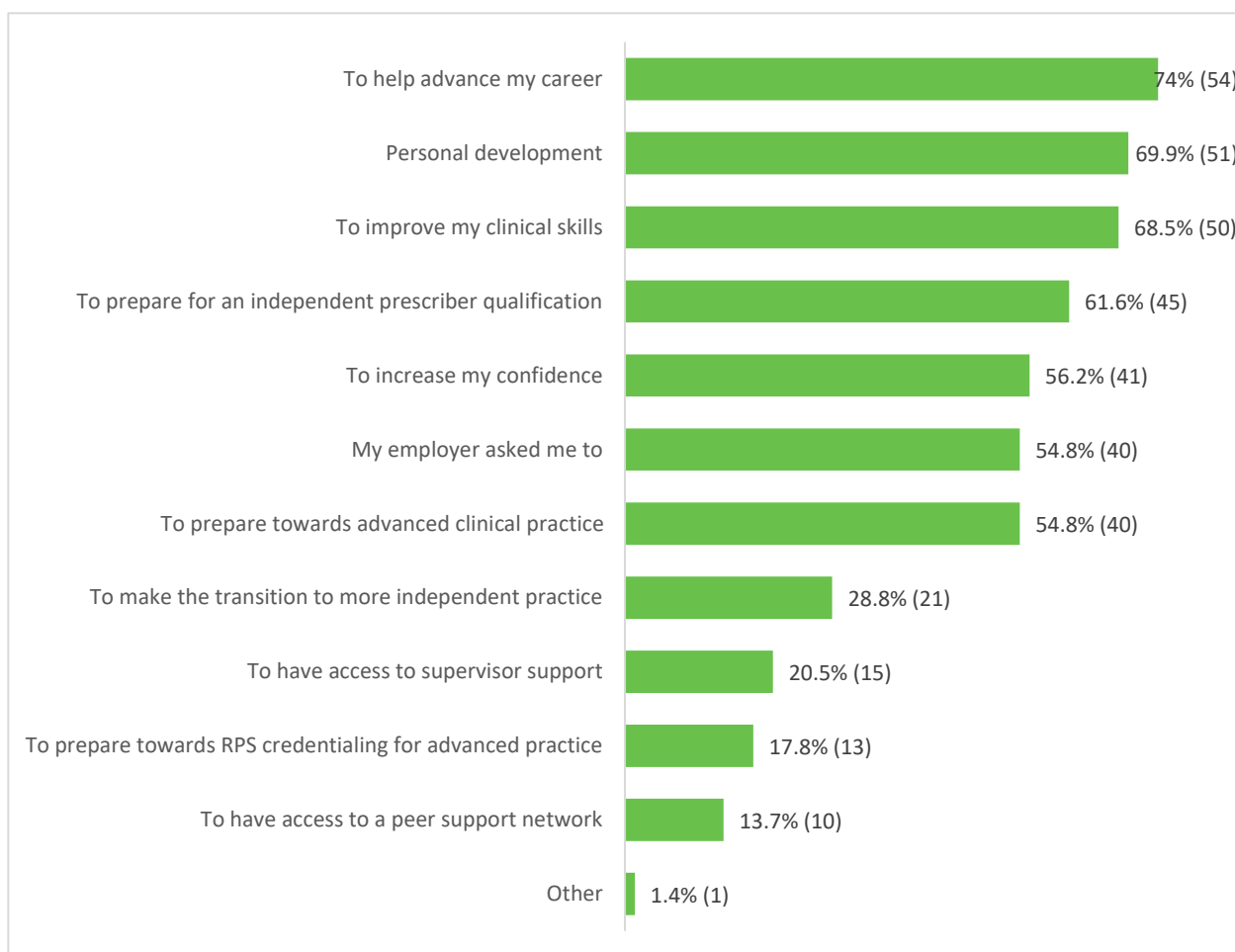
		CPPE Newly Qualified Pharmacy Programme	Any postgraduate diploma delivered by a UK university	Boots Healthcare Academy newly qualified pharmacist programme	Total
White	Count	7	15	2	24
	%	43.8%	44.1%	40.0%	43.6%
Black and minority ethnic	Count	9	19	3	31
	%	56.3%	55.9%	60.0%	56.4%
Total	Count	16	34	5	55
	%	100%	100%	100%	100%

To understand how well learners had progressed with their learning programmes, they were asked to state the extent of completion. Almost two-thirds (n=52; 71.2%) of respondents were actively participating in their programme, and another 20.5% (n=15) had not engaged despite enrolling. Only 6% had completed all they needed/wanted to, and one respondent ended their involvement in the learning programme before they expected to.

3.4.2 Motivations for enrolling on the learning programmes

We asked learners their motivations for enrolling on the learning programmes, and they were asked to tick all that applied. Most respondents' motivations for enrolling on their learning programme (i.e. >45%) reflected aims enhancing both professional and clinical skills, and 61.6% (n=45) of respondents were motivated to enrol on their programme(s) to prepare for an independent prescribing qualification; see Figure 3.1.

Figure 3.1 What was your motivation for enrolling on this learning programme? (n=73)



When learners were asked whether they intended to work towards an independent prescribing qualification during their career, 84.9% (n=62) said they did. Of these, the majority stated they planned to complete their independent prescribing qualification as part of their Postgraduate Diploma (41.9%, n=26), some planned to separately complete this (32.3%, n=20), a few planned to complete this whilst on the learning programmes (CPPE = 11.3%, n=7; Boots = 1.6%, n=1), and eight respondents (12.9%) were either: completing it currently/undecided of where they plan to complete it/are unsure of what the course is/want to complete after diploma/now that they have completed the CPPE Newly Qualified Pharmacist Programme programme).

To assess whether people on each Pathway had different motivations for enrolling on the Newly Qualified Pharmacist Pathway, a cross-tabulation was run; see Table 3.12.

Table 3.12 Crosstabs between motivations on enrolling on learning programme and the learning programmes (n=66)

% (N) Yes	CPPE Newly Qualified Pharmacy Programme	Any PG diploma by a UK university	Boots Healthcare Academy Newly Qualified Pharmacist programme	Total
Was personal development a motivation?	75.0% (18)	70.3% (26)	20.0% (1)	68.2% (45)
Was it a motivation that your employer asked you?	41.7% (10)	56.8% (21)	100.0% (5)	54.5% (36)
Was career advancement a motivation?	66.7% (16)	89.2% (33)	20.0% (1)	75.8% (50)
Was it a motivation to prepare for an independent prescriber qualification	62.5% (15)	64.9% (24)	40.0% (2)	62.1% (41)
Was it a motivation to prepare towards advanced clinical practice?	54.2% (13)	62.2% (23)	20.0% (1)	56.1% (37)
Was it a motivation to prepare towards RPS credentialing for advanced practice	33.3% (8)	10.8% (4)	0.0% (0)	18.2% (12)
Was it a motivation to make the transition to more independent practice?	25.0% (6)	35.1% (13)	0.0% (0)	28.8% (19)
Was it a motivation to increase your confidence?	66.7% (16)	51.4% (19)	20.0% (1)	54.5% (36)
Was it a motivation to improve your clinical skills?	70.8% (17)	70.3% (26)	40.0% (2)	68.2% (45)
Was it a motivation to have access to supervisor support?	25.0% (6)	18.9% (7)	20.0% (1)	21.2% (14)
Was it a motivation to have access to a peer support network?	16.7% (4)	10.8% (4)	20.0% (1)	13.6% (9)
Was it a motivation that the learning programme was part of your employment contract?	0.0% (0)	2.7% (1)	0.0% (0)	1.5% (1)

Note: All chi-squared analyses for the above were invalid due to small cell-counts

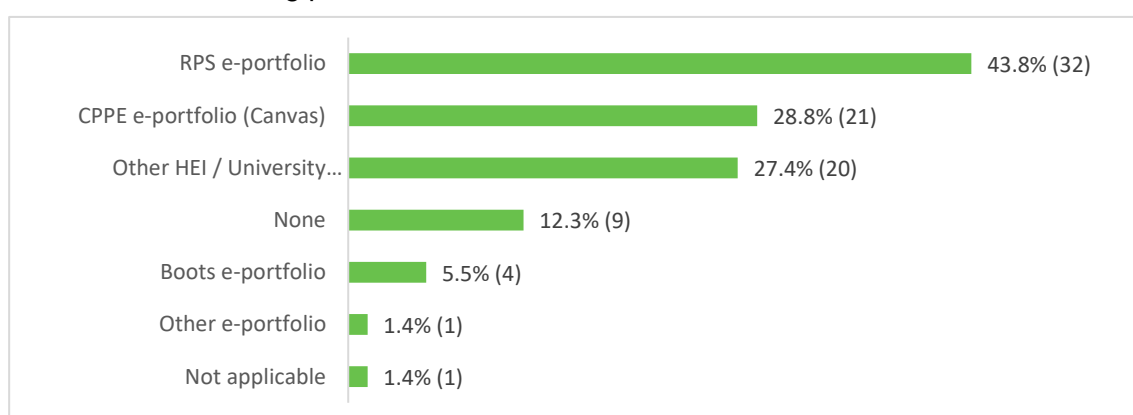
Cross-tabulation was run between gender and motivations for enrolling on the learning programmes to see whether there was any variation. Two of the statements showed gender as impacting significantly: Women were significantly more likely to have been choosing personal development as motivation (women: n=38; 74.5% - men: n=8; 50.0%) and a motivation to increase their confidence (women: n=32; 62.7% - men: n=5; 31.3%).

3.4.3 Learning Platforms

Each learning programme has associated e-learning platforms. To assess engagement with each of these, participants were asked which ones they had used; see Figure 3.2.

Figure 3.2 Which e-portfolios or learning platforms have you engaged with? (n=73)

It appears that the greatest engagement was with the RPS, CPPE, and HEI/University e-portfolios and/or learning platforms.



Learners were asked how relevant the e-portfolio or e-learning platform that they used to their professional development as newly qualified pharmacists; see Table 3.13.

Table 3.13 How relevant have you found the e-portfolio or e-learning platform to your professional development as a newly qualified pharmacist? (n=78)

N (%)	Highly relevant	Somewhat relevant	Neither relevant nor irrelevant	Mostly irrelevant	Not relevant at all
RPS e-portfolio (n=32)	6 (18.8%)	20 (62.5%)	4 (12.5%)	2 (6.3%)	0 (0%)
Boots e-portfolio (n=4)	1 (25%)	0 (0%)	2 (50%)	1 (25%)	0 (0%)
CPPE e-portfolio (n=21)	12 (57.1%)	8 (38.1%)	0 (0%)	1 (4.8%)	0 (0%)
Other HEI/University learning platform or e-portfolio (n=20)	5 (25%)	12 (60%)	1 (5%)	1 (5%)	1 (5%)
Other e-portfolio (n=1)	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)

3.4.4 Support and supervision

When asked if they had a work-based supervisor, 49 of 71 respondents (69%) said they did. For 21 of these 49 respondents (42.9%), this supervisor was their line manager.

Participants were also asked how frequently they had contact with their work-based supervisor and how important they found them to their professional development. Most of the 49 respondents met their work-based supervisor monthly (n=16; 32.7%) or less than once a month (n=23; 46.9%). Eight (16.3%) said they met them weekly; and two (4.1%) never met them. Most respondents considered their work-based supervisor as highly important (n=15; 30.6%) or somewhat important (n=21; 42.9%) to their personal development; see Table 3.14.

Table 3.14 How important was having a work-based supervisor to your professional development as a newly qualified pharmacist? (n=49)

Level of Importance	N(%)
Highly important	15 (30.6%)
Somewhat important	21 (42.9%)
Neither important nor unimportant	7 (14.3%)
Mostly unimportant	2 (4.1%)
Not important at all	4 (8.2%)

When asked if the participants had an educational supervisor (i.e. a supervisor based outside of their workplace), only 28 of 71 respondents (39.4%) had someone fulfilling this role.

Similarly, they were asked how frequently they had contact with their educational supervisor, and most responded monthly (n=11; 39.3%), or less than once a month (n=14; 50.0%); two said never (7.1%), and one did not know (3.6%). Responses to a question on how important they found their educational supervisor to their professional development as a newly qualified pharmacist are shown in Table 3.15

Table 3.15 How important was having an educational supervisor to your professional development as a newly qualified pharmacist? (n=28)

Level of Importance	N(%)
Highly important	7 (25.0%)
Somewhat important	12 (42.9%)
Neither important nor unimportant	4 (14.3%)
Mostly unimportant	4 (14.3%)
Not important at all	1 (3.6%)

For half of the respondents with an educational supervisor (n=14), this individual was based at the Centre for Postgraduate Pharmacy Education (CPPE) (n=14), and for eight, they were based at HEI/University. Two respondents were supported by Boots Healthcare Academy Trainers (HATs). Others were supported by a supervisor at work (n=3), or the course team and clinical trainers of the modules they were learning from (n=1).

We ran cross-tabulations to assess whether there were any differences regarding the level of support between the learning programmes; see Table 3.16.

Table 3.16 Cross-tabulations of the presence of a work-based supervisor and learning programme and the presence of an educational supervisor and learning programme

% (N) Yes	CPPE Newly Qualified Pharmacy Programme	Any postgraduate diploma delivered by a UK university	Boots Healthcare Academy newly qualified pharmacist programme	Total
Do you have a work-based supervisor? (n=64)	11 (50.0%)	33 (89.2%)	1 (20.0%)	45 (70.3%)
Do you/did you have an educational supervisor? (n=64)	11 (50.0%)	33 (29.7%)	3 (60.0%)	25 (39.1%)

The cell counts were too small when chi-square analyses were run for both cross-tabulations above.

3.4.5 Learning activities

Learners were expected to engage in a range of learning activities. To understand which types of activities had the greatest engagement, respondents were asked how relevant they found each learning activity they undertook was to their professional development as newly qualified pharmacists; see Table 3.17.

Table 3.17 Relevance of each learning activity to professional development for newly qualified pharmacists

N (%)	Highly relevant	Somewhat relevant	Neither relevant nor irrelevant	Mostly irrelevant	Not relevant at all
Learning or training needs assessment(s) (n=45)	19 (42.2%)	20 (44.4%)	2 (4.4%)	3 (6.7%)	1 (2.2%)
Study days or workshops outside the workplace (n=47)	20 (42.6%)	24 (51.1%)	2 (4.3%)	1 (2.1%)	0 (0%)
Study days or workshops in the workplace (n=10)	3 (30%)	6 (60%)	1 (10%)	0 (0%)	0 (0%)
Observations of your practice with feedback (e.g. supervised learning events) (n=37)	23 (62.2%)	12 (32.4%)	0 (0%)	2 (5.4%)	0 (0%)
Case based discussions or reflective activities (n=50)	28 (56%)	19 (38%)	2 (4%)	1 (2%)	0 (0%)
Mentoring or coaching (n=11)	6 (54.5%)	5 (45.5%)	0 (0%)	0 (0%)	0 (0%)
Other (n=4)	1 (25%)	1 (25%)	2 (50%)	0 (0%)	0 (0%)

A cross-tabulation was run to see if there was any association between learning activities and the learning programmes; see Table 3.18.

Table 3.18 Cross-tabulations between which of the following learning activities respondents had completed and the learning programmes

% (N) Yes	CPPE Newly Qualified Pharmacy Programme	Any postgraduate diploma delivered by a UK university	Boots Healthcare Academy Newly Qualified Pharmacist Programme	Total
Learning or training needs assessment(s)	16 (72.7%)	22 (59.5%)	2 (40.0%)	40 (62.5%)
Study days or workshops outside the workplace	8 (36.4%)	31 (83.8%)	5 (100.0%)	44 (68.8%)
Study days or workshops in the workplace	2 (9.1%)	6 (16.2%)	0 (0.0%)	8 (12.5%)
Observations of your practice with feedback e.g. supervised learning events	4 (18.2%)	30 (81.1%)	1 (20.0%)	35 (54.7%)
Case based discussions or reflective activities	11 (50.0%)	32 (86.5%)	2 (40.0%)	45 (70.3%)
Mentoring or coaching	4 (18.2%)	6 (16.2%)	0 (0.0%)	10 (15.6%)

Note: The chi-square analyses of the above were invalid due to small cell-counts.

4 Findings from qualitative interviews

We interviewed learners (n=7) and supervisors/employers of learners (n=14). We explored learners', supervisors' and employers' perspectives on their understanding of the purpose and benefits of the learning programme, resources used, supervision, reflective practice, workplace-based assessments and challenges in completing the learning programmes. We also interviewed non-engaged newly qualified pharmacists (n=3) to understand the reasons behind their non-engagement with any of the learning programmes.

4.1 Purpose and benefits of the learning programmes

To understand the purpose and benefits of the learning programmes, we started by asking newly qualified pharmacists and their supervisors/employers about the challenges that newly qualified faced during the transition to independent practice. Our interviews found that newly qualified pharmacists have various learning needs, depending on the types of learners, their specific practice settings, their working circumstances and their level of experience. What we found was similar to what was found by Magola et al. (7,12,13). The

transition to being an independent practitioner meant newly qualified pharmacists had a high degree of autonomy in their practice. They were responsible for making clinical decisions, providing medication advice, and managing patient care. This autonomy comes with a great deal of accountability. It was felt that being newly qualified, they lacked confidence in these areas. Being an independent practitioner also meant that newly qualified pharmacists needed to be accountable for their decisions. Hence, they needed to manage their fear of accountability. Newly qualified pharmacists also had to learn how to prioritise in a high-pressure environment. Taking on a leadership role was particularly a challenge for those who had to manage more experienced colleagues. In community pharmacy, newly qualified pharmacists needed to grapple with the responsibilities that come with managing a team or a store in community pharmacy, such as understanding the terms of service and contractual requirements of the pharmacy quality scheme. They also reported lacking peer support, which could offer support during a daunting time. The supervision provided as part of the CPPE programme helped fill this gap. This was especially the case for newly qualified pharmacists who worked for independent pharmacies and for locums, who may not have access to other pharmacists for support.

Learning programmes were intended to support newly qualified pharmacists in overcoming the challenges identified above. Those in hospitals had received information about the Pathway from NHSE presentations at the hospital. This was followed by the line manager encouraging newly qualified pharmacists to sign up, and some felt that the programme was compulsory:

So it was a combination of a couple of things. ... somebody high up in ... came into our work in the first couple of weeks and explained what the Newly Qualified Pharmacy Pathway was. And then that was followed up with an email from my direct line manager saying, "Sign up to this." And that was about it. (L03, not on any programme but using RPS e-portfolio, hospital)

We had a talk ... during my induction weeks at the Trust. They came in to explain it and then I think it was compulsory for all the Newly Qualified Pharmacists in my cohort that had started at the same time as me to sign up to it. (L13, in-house programme, hospital)

Newly qualified pharmacists in community pharmacies knew about the CPPE Newly Qualified Pharmacist Programme from the CPPE mailing list or website:

*On the email because I receive them on a monthly basis. **Information from CPPE about the new webinars, new trainings.** So I applied because I found it quite useful. (L01, CPPE, community pharmacy)*

*So to be honest I wasn't aware of it. It just happened very, like spontaneously that **I eventually went to the CPPE website where it is**, where I recall a lot of my, or just do a lot of my training and qualification and record it there. And I just happened to, because I wasn't too familiar with the, how the whole website work, **I was just playing with it and saw that there was a newly qualified course and I read the description which was something I felt like I could, I needed, I (inaudible)** and so that's why I enrolled, but I don't have the most background story with it but I read the description and that's ultimately why I know a bit about it. (L02, CPPE community pharmacy)*

In general, learners' understanding of the purpose of the learning programmes was to support newly qualified pharmacists in their transition from pre-registration foundation training to independent practitioners. The learning programmes provided them with the confidence needed to perform their new roles and responsibilities. The learning

programmes also provided newly qualified pharmacists with structured learning to develop their clinical, management and leadership skills:

Well, I thought it would be useful to have a structure to my learning, because I sometimes struggle with that lack of clarity that can come with learning on the job, and I thought the Pathway would give me some semblance of structure and allow me to focus my learning in areas that I thought I was weak at. (L03, not on any programme but using RPS e-portfolio, hospital)

There's basically two major areas, one is clinical, and that's actually one of the curriculum, which is the second module is a refreshment of clinical knowledge that you have to have. So I really appreciate that. And then the second thing was I was surprised by how much management that is required of me in my field and it's not like I could enrol in a course. I didn't get that sort of support at work. But here I know that the third module is about leadership. I've not gone that far yet but I'm hoping that that is going to support me in my current position. (L02, CPPE, community pharmacy)

Learners' views of the purpose of the learning programmes were coherent with the supervisors/employers' views:

It's an opportunity to support them [newly qualified pharmacists] in that, their early careers when they start some transition from that pre-registration period into that now actually being a fully fledged pharmacist, [...] working out in community. The majority of them are community based pharmacists, some of them are locums. (S03, CPPE educational supervisor)

The benefits of the CPPE programme for learners included supporting learners towards independent prescriber ready and giving them not only clinical knowledge but also management and leadership skills needed for professional development :

The other thing is I feel like it's going to support me in becoming, hopefully one day an independent prescriber. And I remember that that's also one thing that my supervisor has mentioned, that this curriculum is actually, it works alongside that course that I want to enrol in eventually to become an independent prescriber. Especially with the clinical modules but also, it also, and I'm excited to get there, hopefully gain a lot of management and tools about leadership which is module three. (L02, CPPE, community pharmacy)

The CPPE programme was also seen as a valuable way to support them early in their careers and help them understand the importance of ongoing learning:

I do think it would have a lot of benefit to continue the programme longer term for all these pharmacies, pharmacists that are out there working community pharmacy and quite isolated otherwise to engage in learning. And they don't know what they don't know, and they don't know where to look for it. And even just for the year, just having a bit of support to know what resources are out there, what they can tap into, I think that just will continue that learning and that development of that group of pharmacists in the workplace. (S03, CPPE educational supervisor)

In hospitals, clinical diplomas were seen as a way to standardised learning to ensure that newly qualified pharmacists were having the same learning opportunities and were able to support each other:

So sometimes people do want a bit of a break, but otherwise we encourage people to try and get on the calls, because then it standardises their learning, like what they're learning, and we can, it puts our mind at ease a bit about what they're being

exposed to, that **everybody's being given the same opportunities, the same course**. And it actually gives them a chance as well to benchmark and to **learn from each other** when they go on these learning sets and days, and get to know each other, then they can ask for help. Especially then **the ones that have done the diploma can support the ones that have done the certificate**. And then **it's ongoing, because it's almost a cycle**, right? So then the next cohort comes through in two to three years, and then ones have probably got to the stage where they're managing there then, you know? (S12, hospital educational supervisor)

In many hospitals, completion of a learning programme was packaged as part of career progression:

*It's part of the progression post. So if they don't want to sign up to it, then there's **no prospect of them progressing to Band 7 automatically**, they'd have to apply for any jobs that come up and go through an interview process, and obviously they wouldn't look as good as someone who has completed the programme [diploma]. ... I think everybody just automatically joins and signs up, and nobody's declined so far.... It's up to them to then engage. So we try and involve them as far as possible, but of course, if they choose to do it at a slower pace, then they just won't progress to Band 7 until they've done that. So that puts the incentive in their court, which seems to work quite well. (S14, hospital educational supervisor)*

The main benefit for learners was access to supervisors (see 'Supervision' section):

*To be honest there is two main things for me which also was the reason I wanted to enrol. I was struggling a lot with my **confidence** and so I feel like I gained a confidence boost from doing this learning course and just from having a support or gaining the **support system**. (L02, CPPE, community pharmacy)*

*I guess I hoped it would encourage, because basically what it did is it gave me an **educational supervisor and stuff, and I thought that would encourage my growth towards where I want to be in my career**. ...And I thought that would help me to get where I want to go... I think that was the main driving force behind it, of what I thought would be the potential benefits of it. (L03, not on any programme but using RPS e-portfolio, hospital)*

During the first year, newly qualified pharmacists need someone who can support them as they transition to the role of independent practitioner and independent prescriber:

***I would think it [supervision] would have a place more so. Because again, once you've done your training at uni then becoming a prescriber, I would say that's probably when you need more support**. ... I hope that IPs [independent prescribers] would then perhaps use this course, newly qualified, as just a support structure for them as well. So **I think it's [supervision] even more important**. (S02, CPPE educational supervisor)*

***I think it is quite a big thing to suddenly come out from university and your trainee year and then to be an independent prescriber. I think there's always a place to have that opportunity to have someone that you can turn to for support and feedback**. So it might feel quite daunting to have a lot of people in that role, ...and to feel that they've not got that level of support. So I guess something similar might be useful in that first year (S09, CPPE educational supervisor)*

A unified agreement across sectors could have a positive impact on newly qualified pharmacists as it can provide standardised learning experiences, build a culture of

learning and provide equal access to support and supervision for newly qualified pharmacists:

*I think there needs to be **some sort of cohesive agreement across everything**, and I don't know how you achieve this, but like **community pharmacy, hospital, primary care, all the sectors as to the level of support and supervision that newly qualified pharmacists get, and then that comes with some sort of associated, protected time investment, whatever that looks like**, because otherwise you're ploughing money into something and people aren't actually being able to realise the benefits of it, because they're just completely burnt out and overworked, and stretched, and stressed, and all the rest of it, (S04, CPPE educational supervisor)*

*It's more just ensuring that there's a bit more like **standardisation** in, across the different, I think what sometimes can be quite disheartening for, especially the newly qualified pharmacists is when people work in, when they hear their friends working in a different environment or work in a different hospital and they get that protected learning time, or they don't get those pressures. And so it's just, I'm not sure what HE could unfortunately offer in that, but it's just ensuring that ... So if **something that can be agreed by the, like obviously [NHSE] with the training that the workplaces have to provide and there's something a bit more formal and standardised**, I do think that would be really useful for the new qualified pharmacist. (S10, hospital educational supervisor)*

4.2 Resources

None of the newly qualified pharmacists we interviewed were aware of the Newly Qualified Pharmacist pathway resource library offered as part of the Pathway. The resources used by CPPE learners were the ones provided on the CPPE learning platform. Learners in hospitals doing clinical diplomas or in-house learning programmes used the learning platform provided by the hospitals or the education provider. The RPS e-portfolio was used by CPPE and hospital learners (for those who used it) to record evidence of their learning. We have no evaluation data from the Boots programme as there was a lack of engagement in the evaluation process.

Some learners found the RPS e-portfolio overwhelming because it contained a large amount of information that was difficult to navigate:

Yeah, it's an ePortfolio from RPS. And yeah, I found it quite difficult to use it. ...at the beginning was a bit too much information there and I didn't know how to use it properly. (L01, CPPE, community pharmacy)

Learners who had used the RPS e-portfolio as part of their foundation training in England found the RPS e-portfolio to be easy to navigate:

Yeah. It's OK to navigate. It's quite easy to use and, but I think that's because I was familiar with it from pre-reg [pre-registration foundation training]. (L13, in-house programme, hospital)

As I was a [pre-registration foundation] trainee last year, I was using the RPS e-portfolio as well, so there are similarities and some differences. So I, it has continued developing. So it is very tailored towards the RPS foundation structure, which can be useful.(L04, PGCert, hospital)

For me personally, I find it [RPS e-portfolio] quite obtuse to find anything I want to find. I find it quite unresponsive in the sense that I don't know if I'm pressing the right buttons to do the right thing. I think it's potentially easier for some

people because it's using a similar e-portfolio to what was used in England for trainee pharmacists. **I, however, did my trainee pharmacy year in Wales, which uses a different e-portfolio system, so I am not familiar with this one at all. So I feel a bit out of my depth with the RPS e-portfolio system, because it's just a bit different to the one they use in Wales, where I trained.** So it's just a bit, and I've, yeah, I find it quite difficult to navigate and decide what I'm, and figure out what I'm meant to be doing on it. (L03, not on any programme but using RPS e-portfolio, hospital)

Most learners based in hospitals who used the RPS e-portfolio told us that the purpose of the RPS e-portfolio was to record evidence of their learning and to help prepare for the next steps in their careers:

*My understanding of it is, from what I've seen, it's basically a learning portfolio where you can upload similar things to what we were expected to upload during our trainee pharmacist year, from mini CEXs [clinical evaluation exercises] and reflective accounts, and all that sort of stuff. And from what I can see, that is pretty much it in terms of what it actually is. Yeah, that's it, from my understanding really. **From what I understand it's just really an e-portfolio where you can keep your learning, that's about it.*** (L03, not on any programme but using RPS e-portfolio, hospital)

***I hope that it will help me to gather evidence, which will help prepare me for my clinical diploma** and also for band seven interviews down the line because sometimes I think it's hard to remember the situations, the clinical situations that you've been in and the positive contributions you've made. So, it's quite good to have a portfolio to record things on. So, you can refresh yourself prior to an interview maybe.* (L13, in-house programme, hospital)

One supervisor described the RPS e-portfolio as a tool for reflection and action planning. When learners uploaded evidence from assessments, they were also prompted to reflect on their learning and to develop action plans. These action plans were then automatically pulled into the learner's personal development plan, which made it easy for learners to track their progress and to identify areas where they need further development:

*There's one thing which I really do like about it [RPS e-portfolio] and that is, when you upload any of your evidence from the assessments, under each of the **assessment forms there's an area for reflection and an action plan. And the portfolio is really intuitive, in that it pulls that action plan into their learner actions, which is basically a personal development plan** and so it automatically pulls all of those action plans into one place. So that when it comes to the end of the programme, it's a really clear visual of all of the action plans that they set themselves and the learning they wanted to undertake, based on their reflective practice from that, as from feedback from the assessments, or from a reflective account from a piece of work that they did.* (S08, CPPE educational supervisor)

One of the challenges that learners faced was the abundance of resources available on the RPS e-portfolio platform and understanding the purpose of these resources. Learners were confused by the variety of learning platforms available and how the education provider's learning platform differed from the RPS e-portfolio (for those who used it). They felt there needed to be clear direction at the beginning about the purpose of recording evidence in the RPS e-portfolio:

***I think at the start a bit more direction on how, on the expectations for the portfolio and how we should be using it.** But that has come with time and*

through meetings. Everybody's working on the same page now. But at the start I think, yeah, a bit more direction would have been helpful..(L13, in-house programme, hospital)

Learners' preference was to have all of their learning materials and resources on one platform, which would make it easier for them to stay organised and track their progress. Supervisor played an important role in ensuring that learners understood the purpose of the different resources and learning platforms available:

*I think my supervisor was trying to get me to use the e-portfolio, so if it wasn't **because of her [supervisor] I wouldn't have known how to use it or record my learning actions.** I would say that, yes, I miss a little bit of simplification because there's a lot of tabs and, that I'm just not using, or it's not even relevant for me, I don't. So just some simplification and make, put things into one central area. I don't know if that, like using one website could just make it simpler. (L02, CPPE, community pharmacy)*

4.3 Supervision

4.3.1 Role of supervisors

This section describes the types of supervision, the role of supervisors and how supervision works in practice for the learner.

As part of the Pathway, learners were allocated an **educational supervisor** whose role was to provide support, including academic support and guidance. The difference was in the mode of supervision: CPPE supervision was delivered remotely, while hospital supervisors were based in the workplace.

For learners based at the **hospital**, the hospital educational supervisor would support newly qualified pharmacists in identifying their learning needs, which was dependent on the newly qualified pharmacist's working and learning background and which rotations they were on. These learning needs assessments were then used to identify which of the outcomes within the RPS framework that the learners should be working on and prioritise:

*Each of those newly qualified pharmacists following the Pathway, has a **named educational supervisor** and they will be the person that signs off their evidence officially. ... how it's supposed to happen, is that they are supposed to meet with their, ...At those meetings **they will be discussing the evidence that the student is collecting, they will be discussing their personal development plans and what evidence they plan to collect going forward. They'll be discussing where they are, what they are meeting within the RPS framework and which areas they need to work on,** I suppose discussing any issues. So as well as talking about the academic part of the diploma that they're working on, I think the supervisory role is **also a supportive role** for these newly qualified pharmacists, so if they've got any issues, they've had some, I don't know, for example they've had a difficult situation with a consultant on the ward, being challenged, then that would be the opportunity to discuss that with their supervisor as well.... So at the start of the course each learner will identify what their learning needs are, with the help of the supervisor and obviously that will be individual for that learner. That's either based on, I suppose based on their background and where they've come from, but also where they're currently working within the hospital, so which rotation they're on. So our newly qualified pharmacist will rotate round clinical areas and that will, to a certain extent, determine which of the outcomes within the framework they're going to be working towards, for example.*

And yes, so they will all end up with a very individual plan, but ultimately they're all aiming to achieve the same goal, which is to meet the standards within the [RPS] framework. (S07, hospital educational supervisor)

Learners based at the hospital were also allocated a rotational/practice supervisor, who tended to be a clinician or specialist in a specific area of practice of the rotation. Their role was to support and observe the learner's day-to-day practice. They would give feedback on their observations to the educational supervisor, and they could also discuss clinical cases with the learner. Learners would meet with their rotational/practice supervisor daily.

*I have an assigned educational supervisor, who I meet with regarding the e-portfolio, who will discuss the evidences with me. But then each rotation you have a rotational supervisor. So, they may actually be the person who observes you doing an activity, not necessarily your educational supervisor. The educational supervisors, so, for example, mine is based on Critical Care but they're not all, and she's a pharmacist, but they're not all based on Critical Care. They are all pharmacists within the same trust and they signed up on a voluntary basis, from what I understand, to be **educational supervisors**. So, yeah, like I say, they don't work with us all the time, but **each rotation has a rotational supervisor**, who will observe you on that rotation and then feedback to the educational supervisor, and then we can also feedback. And I've also got my **line manager**, who can provide feedback as well. The rotational supervisor, I would probably check in with them daily. We'll have a huddle at lunchtime to check how everyone is doing, if everyone needs, if anyone needs any help etc during that day, and then if they're having a particularly good day and they're able to chat through a case with me, then they may do that maybe once a week or once every two weeks. My line manager, I was meeting with her more regularly when I first started but now it's past the six month probationary period. It'll probably be every few months now (L13, in-house programme, hospital)*

Educational supervisors would also conduct case-based discussions to provide learners with reflective learning opportunities in which learners discuss a patient case with their supervisor, with the learner assessed on their thinking and decision-making. The learner then presented the case in a weekly group supervision session, which happens every 3-6 months in some hospitals:

So there'll be one to one case based discussions with the tutors whenever they've had an interesting case, or they've had to look into an evidence base, or things like that. So we, it's, yeah, it's structured in the learning objectives that we've put when you're on, in this rotation, these are the things that we'll expect you to know. These are the things that we'll expect you to do. Here is the reading that you can do, and here are the assessment forms that you should look to complete during that rotation. And, yeah, so it is very much left to the newly qualified pharmacists to organise that and get those sorted. We have weekly group supervision sessions that are, we allocate case presentations at those sessions, so the newly qualifieds will have a case presentation every three to six months. They will be going to the wards with their tutors at least every two months for a workplace based assessment. They will be expected to do teaching activities and a critical review of a paper. So there are set things that we expect them to do. ... It's less taught, if that makes sense. It's more supervised and feedback driven.(S14, hospital educational supervisor)

For the **CPPE programme**, the support that the educational supervisor provided included supporting learners in identifying their learning needs and in developing a personal development plan, completing module reviews and conducting supervised learning events.

At the start of the programme, the CPPE educational supervisor would meet the learners to discuss their learning needs and develop a personal development plan to achieve the learners' objectives and evidence their learning in the RPS e-portfolio:

Within that 12 months they've got the opportunity to have somebody who, like myself, who's able to direct their learning, think about what gaps they've got in their knowledge, give them access to certain programmes to develop themselves and put together a portfolio of evidence to credential themselves against the RPS standards for foundation level pharmacists. (S03, CPPE educational supervisor)

The purpose of the learning needs analysis was to help learners prioritise their learning. This educational supervisor described that often learners wanted to go straight into the module about clinical skills. However, due to this learner's prior practice experience, they needed to gain more experience in consultation skills first:

*So at the start of, and we do this at the **initial meeting**, they do a **learning needs analysis**, and that learning needs analysis allows them to **prioritise their learning based on what they're doing**. ... and sometimes, because a lot of them will probably go into the session thinking that module two, which is the **clinical content**, would be their priority, but then after the conversation it's a lot more of the module one. So, the **consultation skills**, because if they've come from a setting like being at university and then in the community, they may not have had many consultations, much experience. So I find it's a useful, just trying to find out **what they want from it and that way you can guide them and or at least signpost them to the RPS framework and then they can have a decide themselves about what they want to do**. (S02, CPPE educational supervisor)*

CPPE educational supervisors reported also explaining the purpose of the programme and what the programme entails to the learners because they found that often learners did not understand what they had signed up for:

*So the idea is we have a catch up just to introduce ourselves, and then we explain a little bit about the **RPS portfolio**, and we sign post them to all of the information that they need to access to do the induction, and to **understand the outline of the Pathway and what the purpose of the Pathway is**. So I think some people sign up to the Pathway not understanding what it's all about. Especially that there's no protected study time with the Pathway, it is all self-directed, and if they are locums and they're doing like ten days straight and it's difficult to juggle. So my first thing at the initial meeting is just to make sure they go away, [...], they've read the programme overview and they've done the induction. So they've got good understanding of what the programme actually entails. (S05, CPPE educational supervisor)*

The learner would meet CPPE supervisors regularly. However, CPPE supervisors were flexible in their approach and would meet learners on an ad hoc basis if needed. Learners could also approach them through email, WhatsApp or phone:

So we have a structure where we have our fixed meetings that we definitely want to do, but there is also an ad hoc, sort of a needs basis. So if there were any issues, we would just set a meeting in between or a catch up in between. So it's quite flexible in that, so they can reach out either through email, WhatsApp or via phone if they do need to catch up before our next scheduled meeting. (S05, CPPE educational supervisor)

As there were some challenges that were sector-specific, the different learning programmes across settings provided learners with support to address these sector-

specific challenges. For example, in community pharmacies, newly qualified often work in isolation. This supervisor was able to introduce newly qualified to other peers:

*I was hoping to just **gain a network** because my thing is I was **locuming**, I'm also in a position where I'm somewhat relatively new to the country, so I don't know a lot of people. So just from the Pathway and the course itself I was hoping to get in touch with other pharmacists really and have that support system....this is where **I credit my supervisor a lot. She was able to get me in touch with someone who was in similar position as me** and so yeah that has helped, I am a lot in touch with her. (L02, CPPE, community pharmacy)*

Boots learners had access to Health Academy Trainers. However, we did not have data from Boots learners that can help us to understand how supervision works in practice and the support these Health Academy Trainers provided for Boots learners.

4.3.2 Learners' views on access, content and quality of supervision

For CPPE programme, learners met their educational supervisor monthly:

Monthly, I think. Not every week. Monthly because I don't need so much information. Usually I can get it from the platform, from the [learning platform] where I used to read (L01, CPPE, community pharmacy)

Hospitals had differing expectations on how often a newly qualified pharmacist should meet their educational supervisor, for example, every two weeks, once a month or once every two months:

so the supervisor and the student are supposed to meet every two weeks and that's our expectation, that I make clear that that's the expectation. (S07, hospital)
then the educational supervisor is once a month to once every two months, was the target for us at the Trust.(L13, in-house programme, hospital)

Educational supervisors were proactive and could be approached on an ad hoc basis and outside the scheduled/regular meeting as needed by the learner:

The supervisor is quite active. Yeah, usually, she approaches me when the meeting is to be start or the meeting will approach, yeah. And I have to prepare in some way for the meeting. (L01, CPPE, community pharmacy)

if I ever need her she did say that I can reach out and she has reached out with, if she saw something that could basically benefit me. So she sent me an email for instance to let me know there are these courses of, that I've been speaking to her about and I appreciate that she's been keeping an eye on that and let me know as soon as she knew anything. So outside of schedule but outside of planned schedule and meetings she does reach out to me I'd say. (L02, CPPE, community pharmacy)

Supervisors were viewed as always very helpful. However, some learners found it could take a while to get a response and that they needed to plan meetings well in advance. One hospital learner's strategy for ensuring protected supervision time was to schedule supervision meetings for the entire year:

*So I have a designated educational supervisor. So we meet once a month and go over things...and she's always useful. She's a good person to go to. ... So my ES [educational supervisor] is very good, but she only works part time, and she is incredibly busy. So it can take a while for me to get an email response from her most of the month. So **we calendared in meetings over the next year ahead of***

time, so that we can then work around. However, yes, as I mentioned, there's a lack of day-to-day supervision. (L04, PGCert, hospital)

4.3.3 Supervisors' views on quality supervision

Supervisors needed to adapt their approach to supervision to suit the different learning needs of the newly qualified pharmacist:

*They're all, to be honest, their paths are all very different. So one is a newly qualified pharmacist, another has been in the profession for quite a number of years, but due to starting a family has dipped in and out. So their level of understanding, and their skill set, is very different to somebody who is newly qualified and is still just finding their feet with being a pharmacist and being new to the register, because that comes with a **completely different set of needs**. So without, you have to adjust your style and the needs according to the learner and their situation. And my other learner qualified a couple of years ago, but hasn't been practising. So they are, they're quite different in their journey. So naturally their approach and what they're hoping to get from the Pathway is different. (S05, CPPE educational supervisor)*

In some hospitals, pharmacists who had been working for three years were expected to provide supervision without being provided with the necessary training to take on this role. However, not all supervisors could and wanted to be a supervisor:

In any training programme we need to make sure everybody gets that supervision, but we earmark it for, once you get three years you can then arbitrarily look after a trainee pharmacist, traditionally the pre reg, old lingo. And it's like, well, what just because you're three years, but actually you need skills to do that well, you need time to do that well and actually you need feedback on whether you give feedback well. Because actually if the, the workplace assessments are only as good as the people observing them and how much commitment they have and interest and it works on their experience and their knowledge. And the best ones are some and you want a range of people done and that's the benefit of the diploma, it forces a range of people to give their feedback, but in any system if you don't, I suppose if you don't support the supervision aspects of, support the trainers to support the trainees in whatever programme of study, it starts to unravel.... let's get someone who's ready to do one, wants to get exposed to it, is generally interested in it and let's fit it into their job plan, not arbitrarily say everyone needs to do this one. People get to the end point doing a range of different routes and I think we need to acknowledge that. (S13, hospital educational supervisor)

Several characteristics were identified by supervisors in our interviews as being essential for supervisors. Supervisors needed to be learner-centred, which included being patient and flexible in their approach to cater for the different learning needs of newly qualified pharmacists and be approachable:

*I would say it's having patience and making sure you don't have any preconceived ideas or perceptions of people, because everyone is different about how they approach studying, so being adaptable. I think being approachable as well, so that you can be there to support people, being flexible, being knowledgeable so that you know the course, so you can offer appropriate guidance and support. Yeah, just genuinely, **it's more about supporting**, it's definitely not, as I say, because they're adult learners you can't, it's not about teaching, **it's just about supporting and guiding and facilitating**. So trying to get the **learners to understand, to***

identify their learning needs and work towards them and we're just here to guide and support, is how I see it. (S02, CPPE educational supervisor)

first of all, I think you've got to be a **friendly, approachable but professional face. So, they know they can come to you.** They don't feel like they can't say things to you or they don't want to disclose things that, you need to be someone who they'll be happy to talk to. (S04, CPPE educational supervisor)

Supervisors also needed to be able to actively listen to the learners as some newly qualified pharmacists required a sounding board, especially those working in community pharmacies where the learners could be the only pharmacist, and supporting them and giving them the tools necessary in making informed decisions:

*there's quite a lot of things that go into it really. I think, from what I've gathered from my meetings so far, you have to be a, you need to actively listen, because sometimes they do just want to use you as a sounding board. I think it's, you also need to remain impartial. So even if I have a, an opinion on something, I, it's not my job to share that opinion, it's just **to support the learner to make their own decisions, but give them the tools that they need to make an informed decision, and signposting them, and also giving them responsibility for their learning as well and not to give them all of the answers. To just, because for them to be able to have competent and confidence in their professional ability**, giving them all the answers isn't the answer to that. It's about supporting them to make informed decisions because they need to do that in practice. But just giving them the tools to be able to do that.* (S05, CPPE educational supervisor)

They needed to be confident about the programme requirements and able to support learners to navigate, prioritise and take responsibility for their own learning:

*I think it's helpful if you're confident about what the program requires. **I think the first year of running anything new is always a bit hit and miss because we are all trying to work out what to do together and once you've done it once then you can help people understand what, how they need to structure things and what different things mean.** So you need to be interested in, you need to make the time to work out what's going on and be reasonably confident around it. So then it's a difficult one I suppose, so **it's that balance again between being empathetic and understanding that they've got a lot on but also making sure that they have a bit of a plan to get through the work.*** (S11, hospital educational supervisor)

Skills to provide constructive feedback and be supportive to learners were recognised as important:

*they're there in a supportive capacity as well, so they need to be **approachable.** They need to have skills like, **ability to give constructive feedback** And if you have a student who is falling behind the deadlines and struggles with time management, you need to get help, **have the skills to get that student back on track.*** (S07, hospital educational supervisor)

4.3.4 Training and support for supervisors

CPPE supervisors were provided with training to ensure consistency in supervision provided:

For CPPE because we've, we're all educational supervisors, we've all been given a particular amount of training anyway, that we were given when we first joined

with CPPE around how to support learners, how to ensure we're giving effective feedback, etc (S03, CPPE education supervisor)

The CPPE training for supervisors covered a variety of competencies, including EDI, consultation skills, supporting learners, statement of teaching proficiency, reflective essay on teaching and development, assessment, leadership, personality types, and approaches to learning. This training was seen as helping supervisors to be more effective in their role and to better support the development of their learners.

So there's certain mandatory training that you have to do as part of it. .. there's different competencies that you have to gain about your EDI and all of that stuff. Oh, I feel like, I'm just casting my mind back to different things that you have to do. So we've had to do, as part of my induction process with CPPE, there's various, programmes that I've needed to complete as well, like I said, the EDI, consultation skills, support, there are certain supporting learner programmes that we've had to do. We've also had to do a statement of teaching proficiency. So there's different modules and things that we've had to do, and then we've had to write reflective essays. So we've had to do two reflective essays, on, one on teaching and development and one on assessments.... Yeah. So, and so there's, there is quite a robust training programme, there's lots of different things to consider, like your leadership, your personality type and that's where they go in, it goes in your Myers-Briggs stuff. But there is, there's lots to get you to think about how you approach your learning style and how you use that knowledge to support others. (S05, CPPE education supervisor)

In addition to the training, there was a platform available for educational supervisors that provided background information on the learning program, including the modules, expectations, commitments, how to use the RPS e-portfolio and additional resources.:

So CPPE are just really good at looking after their staff I'd say. So there's a lot of information around, there's a canvas section just for educational supervisors, which gives you a background on the, what's involved on the course, the module breakdown, what's expected, commitments, like planned meetings, there's a lot of reading around it. There's guidance on how to use the RPS portfolio, so they support that. (S02, CPPE education supervisor)

There were monthly meetings for educational supervisors on the learning program, emails with regular updates, a support page with hints, tips, and support documents for supervisors, and a WhatsApp group for educational supervisors.

So we have regular monthly meetings as educational supervisors who look after newly qualified pharmacists. These are, they're not a meeting with a complete agenda as such, it's more where we can bring issues we're having, discuss problems we may be having, or any, ask for advice from colleagues who maybe have had a similar experience. We share any updates that are happening with the programme. So we have these regular monthly meetings across different regions. So it's across the whole of the country. We all join together as newly qualified, educational supervisors looking after newly qualified pharmacists. And if you can't attend the meeting, then obviously they are recorded, to mean that we can watch the recordings and find out if there's any information that we didn't know about, that maybe something's come out. ...Emails will come out with any updates at all as well, and we also have a support page that we can refer to with lots of helpful handy hints, tips, support documents for supporting learners with different bits of the programme. There's a lot of information and support that we've got (S03, CPPE education supervisor)

The availability of a lead for the program, a line manager, and a buddy system provided educational supervisors with additional support mechanisms, which could help them to be more effective in their role:

We have a lead for the programme who we can ask. (S03, CPPE education supervisor)

My line manager ... is always quick to respond to email, she's fantastic. So if I've got any queries or problems, you just drop her on email and she will literally respond within about 10 minutes, so she's brilliant. So I feel very comfortable going into it as an educational supervisor, because I feel like I've done my background reading and when I go, as I, I keep refreshing myself, so obviously before my next meeting with them, with the learners, I'll end up looking into what's expected a bit more, keeping on top of it. Also there is keeping on top of any changes, announcements, that sort of thing. (S02, CPPE educational supervisor)

And we also have a buddy, so I have a buddy who I can contact at any point if I've got any questions, and they're somebody that's been doing the Pathway for about three or four years now. So they're well versed, they're a good font of knowledge for me as I'm finding my feet with it. (S05, CPPE educational supervisor)

Some hospitals used the training funded by NHSE, which was found to be very beneficial. The following hospital education lead discussed holding regular meetings to remind supervisors of their roles and responsibilities, the purpose of the learning program, and the learning objectives, and disseminating this information to group members:

I think I did a course that was recommended I think by [NHSE]. (S12, hospital educational supervisor)

*we ask people to complete the supervisor courses that are offered by [training provider]. Again, they're [NHSE] funded, so we're making use of those... We have made use of the educational supervisor course and practice supervisor course there. And unfortunately the funding for that is coming to an end this year. .. so I've just encouraged everybody to apply to those courses before the funding runs out. And they're really good courses, to be honest, they're quite good about how to get a learner motivated, ... But yeah, they're just really useful courses, and I think everybody who's joined them has found them really useful. **I would expect people to have some kind of supervisor training before they undertake a supervisory role. Unless they've got prior experience of supervising. I've got a little sheet for supervisors, to know what's expected of them**, and then they, I run a regular, well, just the local faculty group meeting, so we have in our trust reminding people what their roles and responsibilities are, basically, and what's the purpose of the training programme, and what the learning objectives are. So that's all disseminated by the local faculty group meetings. (S14, hospital educational supervisor)*

In some hospitals, supervisors came forward to volunteer, and this was mostly based on their availability rather than their experience or knowledge. In other hospitals, it was expected practice for pharmacists to supervise others at any stage of their careers:

They are all pharmacists within the same trust and they signed up on a voluntary basis (L13, in-house programme, hospital)

What we're struggling with in our trust actually, and I'm not sure if it's the same for other trusts, is we really lack the middle grade pharmacy staff. So I'm supervising as principal pharmacist, simply because I haven't got experienced Band 7s that are able to supervise the newly qualified pharmacists. So I'm hoping when the

newly qualified become Band 7s and integrate, that they are, will then be able to take over supervision and we'll have a handing over and a hierarchy. But yeah, the struggle is the middle grade (S14, hospital)

4.4 Reflective practice

Supervisors told us many learners faced difficulties in adopting reflective practice. This was evidenced in the challenges learners faced when putting evidence of their learning into the RPS e-portfolio. However, this was a challenge that was common for newly qualified pharmacists early in their careers:

What the pharmacists are not good at [...] thinking about how they've applied it in practice and that's what I try and pull out for them to get into their portfolio...(S08, CPPE educational supervisor)

*I think that is the hard thing, is keeping up to date with the learning and then, and that's probably **one of the things about putting the evidence into the portfolio, it's just additional things that you've got to do.** I tried to encourage her to have like a diary or a notebook with her in her workplace, so she could capture, I think that's what she found hard was, she'd done, she had done the learning, but she couldn't always give me, or she could, she began, it was, I think for her, **it was hard explaining how she'd applied the learning.** I think this is quite common with revalidation, it's, you can do learning but then demonstrating to the regulator, or to me, how you've actually applied that learning and how it's improved outcomes for patients for example, she particularly found that quite hard. And you could see that she was doing it, but she just didn't know how to reflect on it, I guess. I think that's something that's quite common early on in pharmacy career.(S09, CPPE educational supervisor)*

Recording evidence of learning in the RPS e-portfolio was seen as additional work rather than part of the practice of lifelong professional learning. Learners struggled to record evidence of their learning in the RPS e-portfolio, despite guidance provided in the RPS e-portfolio and encouragement from their supervisors. Learners did not fully understand the purpose and benefits of recording their learning, which was likely due to the fact that there was a lack of a culture of learning within pharmacy. One suggestion was to incorporate reflective practice as part of practice standards from the foundation year:

*She wasn't very good at entering stuff into the e-portfolio, I think that was mainly because of **not really understanding how to do it**, despite there being a very useful user guide and me signposting her to, the RPS do run webinars on how to use the portfolio, but it does take a bit of work, ... So I think maybe she didn't and I, this is experience I've had with other learners, **they perhaps didn't use the portfolio to its maximum potential, despite me telling her that, that portfolio is there now to support her, and providing lots of really useful evidence if she did want to go on and, for example, do independent prescribing.** So, yeah, despite my encouragement, there wasn't so much, she was doing, she'd got lots of evidence, but she just wasn't so good at recording it down and understanding the benefits of the long term..(S09, CPPE educational supervisor)*

*They do, to mixed standards. One, **e-portfolio recording is a bit alien to the newly qualified pharmacist, so I find they should be used to practice standards from pre reg year [pre-registration/foundation year],** but, they've got the competencies, but they struggle to understand what needs to go in it. The e-portfolio took a little bit of time in terms of how it works, just from the technology side, but then I support with that and I help them to understand how to document*

*within it. But they find it difficult, they do what they do and they can talk about it, they find it difficult putting it down on paper. And I don't know if it's a case of, they don't see the benefit and they don't, what is the, I know what I've done, I can talk about it, **I don't think they truly see the benefit of documenting it, other than to meet the need of the programme.**(S08, CPPE educational supervisor)*

Another suggestion was to provide a structure in the RPS e-portfolio for learners to provide reflective accounts of their learning:

*The problem **is the portfolio isn't really, there's no structure for that to go in there, so it's additional entries that I am asking them to do to showcase that, where they can start thinking about, what have they learned, if they were looking at specific clinical area what did they learn? How have they held a consultation with a patient with that clinical condition? How did they use person centered care? How did they use shared decision making? What clinical decision did they make and what guidance did they use to support that decision? But there's nothing in the e-portfolio that talks them through writing in that manner. So if you look at all of the assessment entries that they upload, if you look at reflective accounts that it takes them through, unless you ask them to do that as ad hoc evidence, the programme doesn't lend itself to asking them to showcase evidence in that level of detail and application of clinical knowledge. ...and I ask them to document them as either reflective accounts, which then allows them to think about, what did they do well and also then areas where they feel their clinical knowledge may be lacking and they may need to do further learning. So I will tend to encourage them to upload those as reflective accounts, as ad hoc entries. But it's additional work.** (S08, CPPE educational supervisor)*

It was thought that the RPS e-portfolio could be used to start learners to become accustomed to writing reflective accounts of their learning, which is an important part of developing the reflective practice skills that are essential for ongoing professional development and progression to advanced practice or independent prescribing:

*So I think it just will give them that solid basis for getting used to using something like a portfolio [RPS e-portfolio] to evidence themselves as well, to show that they're working to a certain level. It gives them that confidence in that first year to mean that they hopefully will develop as a pharmacist and not feel maybe quite so isolated working in an environment like community pharmacy. **And hopefully, if they are able to credential themselves to say they're working at that initial practice level, that then they can think about developing themselves further and go on to do further learning, whether that be something like independent prescribing, or a diploma, or whatever it might be, to just, it continues that appetite for learning and development, and constantly thinking about areas and gaps in knowledge.** (S03, CPPE educational supervisor)*

4.5 Workplace-based assessment

In hospitals, there was variation in how workplace-based assessments were conducted in practice. However, generally, learners were assessed on various skills such as their clinical evaluation skills, procedural skills, consultation skills and professional judgement in clinical cases:

There are different work based assessments. ... so mini CEXs (clinical evaluation exercise), DOPS (direct observation of procedural skills), CBDs (case-based discussion), POCAT (patient oriented consultation assessment tool), which is a consultation skills one. (S07, hospital educational supervisor)

Learners in the hospital were assessed via direct observation of their practice, which was found to be helpful in identifying the learner's future learning needs:

They will be going to the wards with their tutors [clinical/practice supervisors] at least every two months for a workplace based assessment. (S14, hospital educational supervisor)

In a hospital with specialist pharmacists, the assessment was done by the senior specialist pharmacist. For example, the respiratory assessment would be done by a respiratory pharmacist.

So it's usually each pharmacist within the directorate. So I'll conduct them for pharmacists that are in the education rotation, the medicine pharmacist might do it for those in hers, respiratory pharmacists might do it in hers. (S12, hospital educational supervisor)

If for example the student is doing a case based discussion about antimicrobials, then it would make sense to do that with the antimicrobial specialist pharmacist, because they'll get much more out of it if they do it with the specialist pharmacist. (S07, hospital educational supervisor)

However, there were times when it was not possible to get a specialist pharmacist or there were no senior pharmacists available to do the workplace-based assessment. In these cases, the learner may have needed to get another senior pharmacist or their line manager to conduct the assessment:

As we are short staffed at the moment it's really hard to then ask people to do assessments and mark work and stuff before it goes in. (S11, hospital educational supervisor)

But then sometimes it's, just happens whoever's around at the time, if the student finds a patient that they want to do a work-based assessment on, then they might grab a senior pharmacist if they're free and take them to the ward. So there's that. But then sometimes it's, just happens whoever's around at the time, if the student finds a patient that they want to do a work-based assessment on, then they might grab a senior pharmacist if they're free and take them to the ward. (S07, hospital)

So they'll contact the senior pharmacist in that area, or if that pharmacist isn't around, then they might contact their manager just for them to assess them. (S12, hospital educational supervisor)

On the CPPE programme, assessment included supervised learning events, remote assessment, and recording of learning in the RPS e-portfolio. At the supervised learning events, the educational supervisor visited the learner's workplace and observed the learner in various activities such as their consultation skills (face-to-face and telephone consultations), clinical assessment skills, clinical decision making and interactions with other members of staff and with patients:

There will be a direct observation of a consultation, where I will be observing mainly their consultation skills and thinking about how well did they introduce themselves to the patient and explain the purpose of the consultation? How well did they gather information from the patient and allow the patient to talk through their own concerns and ideas and how they demonstrated, again, that person centred care? And then going on to think about the decision that they made and how they did that in collaboration with the patient and then how well they closed and safety netted the patient. ... But it would be to observe and then we'd have a debrief afterwards then, around their application of consultation skills. And also to do a direct observation of them doing a clinical assessment. So that may be

doing a blood pressure monitoring, it may be temperature checking and how well they describe the procedure to the patient, whether they offer, do it within their own procedure, so they're complying with the standard operating procedure for providing that and how well they performed that procedure and then how they interpreted the results and discussed that with the patient as well. **It's quite nice sometimes to do a, where they do a telephone consultation as well as a face-to-face consultation and you can see how they come across differently on the phone, to how they do face to face where they can read a patient's body language.** So I do try and get one face to face, one telephone if I'm lucky. (S08, CPPE)

CPPE learners were also assessed using case-based discussion, completed either remotely or face-to-face. Here, a learner would be asked to bring a case to discuss and reflect on. For example, how they have managed the patient, what guideline(s) were used, and what they would do differently. This was to assess the learner's thinking and clinical decision-making:

*And if it's more the **clinical** one, then obviously we do that **case-based discussion** where we get them to bring an interesting case that they'd like to talk about, and think about questioning them about how they managed that patient, what guidelines they used, would they do anything differently next time? So just getting to, trying to explore maybe some things they hadn't thought about that they could think about for next time they're managing somebody like that. That's the different events that we do with them. (S03, CPPE)*

So they will be the pharmacist describing, more doing a reflective account, so this is one piece of evidence where they do get to share their application of clinical knowledge, but it is only one piece of evidence in the whole e portfolio, that really goes into their clinical application and they will reflect on a consultation they've had with a patient clinically and then we will have a remote discussion. So we'll do it via Zoom usually, or Teams and they will describe the scenario and how they managed it, how they dealt with it. What was their decision making? What informed those decisions? What was the outcome? (S08, CPPE)

Other assessments completed remotely included the learner's leadership skills, for example, how they have managed a team, quality improvement, for example, what they have done to improve quality and a discussion about feedback that the learner received from patients and other staff members:

***And the other ones we do remotely, is them talking through two situations where they have applied leadership skills.** So it could be looking at managing a team, it could be an incident that they've had to deal with, but wherever they've had to demonstrate leadership skills. So again they will talk through that and I will, we'll have a discussion around it and I will assess it based on the conversation. And we'll also do **quality improvement, so thinking about, how have they taken action, either from an audit, or amended or changed a process in the practice, to improve quality?** We do that remotely. And the final discussions that we have is they, when they've had feedback from patients, from **a patient satisfaction questionnaire and what they learnt from that and also a multi source feedback**, so when they've had feedback from colleagues and there I look at in terms of, again, their teamwork and their leadership and all those are done remotely via Zoom or Teams. (S08)*

4.6 Challenges in completing the learning programme

The non-mandatory nature of the Pathway was that there was no protected learning time for learners, making it difficult for learners to fully embrace the benefits of the programme. This was especially a challenge for learners in community pharmacies:

*I think that it's a lot harder now if I'm honest, only because with my current job I'm finding it **hard to complete module** two because of the amount of work time that, so I'm working 45 hours a week and I only have about one or two days off and I'm usually very exhausted. So because of that I, that would be the challenge which is finding the time to go, finding the time basically to go through the modules. So it's, yeah, so if I were to be honest I think it's a lot harder now for me because of time, I'm struggling with time management. (L02, CPPE, community pharmacy)*

*I guess, the bottleneck for both of them was having the time. ... and **it felt like for those who were coming onto this Newly Qualified Pathway, obviously a lot of them are community pharmacists, ...and actually their protected learning time is basically zero.**(S04, CPPE educational supervisor)*

there's no protected study time with the Pathway, it is all self-directed, and if they are locums and they're doing like ten days straight and it's difficult to juggle. (S05, CPPE educational supervisor)

*There's definitely no protected study time. I think she was **doing it on her day off or at weekends**, they're **working long hours** and often stores are open til 7 o'clock at night. (S09, CPPE educational supervisor)*

In hospitals, due to the requirement of university programmes such as the Postgraduate Certificate or independent prescribing course, for students to attend courses either in person or virtually, newly qualified pharmacists had set study days to attend these courses. Moreover, completion of clinical diplomas or in-house programmes was often used for career progression in most hospitals. Hence, learners could see the benefits of doing the programmes to their career progression:

*I think from my experience of having worked in hospital pharmacy, I think whilst it's difficult to balance that job, new job, with learning, **I think because it's quite enforced within hospitals that you've got to do that, people get a lot out of it and they do see development in their careers a lot quicker.** And whilst obviously they might, at the time when you're doing it, you think, oh my goodness, I've got so much going on at work, and now you're asking me to do learning. I think it does mean that you see that progression, you see yourself develop. (S03, CPPE educational supervisor)*

With lack of protected learning time, it was really important for supervisors to provide a tailored approach that suited the needs of the learner and to be flexible in their approach to supervision:

*So they were in a locum position, working for a small group of community pharmacies. And I think that was quite popular that it is **locums, because obviously they don't get the support that they would do with multiples.** But it does mean that they don't always know their work schedule, or it's quite hard to then tie, they're often working maybe five, six days a week, so finding times that we're convenient to catch up with them. And I was always flexible with offering daytime or evening sessions and this particular one, she always had Wednesdays off actually, so we would catch up on a Wednesday.(S09, CPPE educational supervisor)*

The lack of protected time for learners in community pharmacy meant that there was a need to advocate for employers to provide an environment that supports newly qualified pharmacists in learning, for example, through funded training roles. With newly qualified pharmacists becoming independent prescribers from 2026, supervision and supportive learning environments (such as protected time and supportive employers) will be even more important, especially clinical supervision for those working in community pharmacies:

*I think some people want to engage much more in the programme than they're able to. ...and actually then **employers ...giving them [newly qualified pharmacists] some time to actually think about their development and their learning.** But I think that's such a difficult thing. I know we've got it with the **Primary Care Pathway, but that's because they're funded roles and training roles,** whereas we don't have that at the moment with these newly qualified. ...**And actually having some supervision, and some support, and some guidance, and somebody else to talk to, I think it's going to be even, needed even more potentially, because whilst they're going to come out qualified with other extra strings to their bow, actually I think it's potentially quite a dangerous time for the career of pharmacists,** coming out, being newly qualified, but clinically maybe not being as qualified as people we've got now who are doing their independent prescribing a few years down the line, they've got used to being a pharmacist as such, and then they're adding it. I think it's going to be needed even more potentially in some ways, because I think that's going to be potentially quite a difficult transition coming out of university with an independent prescribing qualification. (S03, CPPE educational supervisor)*

*I think one thing which we and I'm sure there'll be plans in place for this, but I think one thing which we could think about is, how are we going to support, especially people in community, with clinical supervision? So our role, that's certainly not the role of the educational supervisors, but where we are looking at **pharmacists being, from 2026 qualifying as prescribers, what clinical supervision is going to be put in place?** ...And so thinking about how they develop their clinical knowledge and having that clinical person, people who could go in and assess their consultations from a clinical side, from a consultation side, where they are in that sort of supervisory clinician role. So I think that would benefit (S08, CPPE educational supervisor)*

Some supervisors highlighted that learner-led, self-directed learning had its own challenges because it meant that learners needed to be able to motivate themselves, especially after their long working hours and for those with caring responsibilities and being proactive in arranging meetings with their supervisors. This was the case for learners based in community pharmacies and acute hospitals:

*I think the reality is just the time that **people need to dedicate to the learning.** Because obviously, **if they've got families, if they're working long hours and with it being entirely self directed, sometimes it's difficult to find the motivation and to be in the right mindset depending on how many days they've worked, been at work to want to do the Pathway...** especially if they've got, so one of my learners has six children, so it's about finding the time to, in amongst all of that, in between work, to then go onto [learning platform], work through the training units and that, that's yeah, I would say that's probably the most difficult thing (S05, CPPE educational supervisor).*

It's probably quite variable, probably if I'm honest it's more supervisor led, but it does, but we do have that conversation every time and we do tell people that they need to be organising meetings and trying to get in people's diaries and working out their deadlines and that sort of thing. I've had one really good, that's not true, I've probably had more than one, but I can think of one recent really good diploma student who would book rooms and book meetings with me and have her work sent to me before the meetings so that I could review it and talk about it at the meeting rather than trying to review it while I'm there. Does that make sense?... So, and that's the brilliant model, and we met every couple of weeks and then that works nicely, but then you've got some students who do nothing for months and then expect you to go through loads of work and in the last minute. So try and leave it to the students, but if I'm honest probably try and arrange meetings every two or three weeks, one meeting to the next really. (S11, hospital educational supervisor)

Being learner-led also meant that learners needed to be proactive to get the best out of the programmes, which was not always the case. Again, supervisors were crucial in supporting learners in identifying their learning needs at the beginning of the programme:

*Well I think that's the same with any education really, I guess it depends on how much work people are willing to put in. So I, as I say, out of the few that I've got, some are really enthusiastic and are saying, well I want to do this, this, some have already done everything that is available to them and at the priority that I would recommend they prioritise at the start. And then some will say, what's the minimum do I have to do to be able to do this? So I think it depends on the learning style and also what they want to get from it. **But again, that's all down to that initial conversation, I think sometimes you get an idea of who just wants that safety net, that contact, who will possibly tell them, look I think you should work on this and also just want the feedback from the supervised learning sessions as well. So, yeah, I think, yeah, that there's a lot to get from it and I think everyone will gain something and probably more will, some will gain more than others if they want to put the effort in. (S02, CPPE educational supervisor)***

4.7 Non-engaged learners

We interviewed non-engaged learners to understand the reasons behind non-engagement in any learning programme.

We asked non-engaged learners their reasons for not signing up for any of the learning programmes. One non-engaged learner identified not having the time to do the programme while working as the main reason for not signing up for any learning programmes. Another reason was the relevance of the programme as they qualified in 2021 and did not see themselves as newly qualified per se and needing to do the programme:

*It was mainly time, because **I didn't really have enough time, because I work full time.** Difficult looking into it. It was also because I've been qualified for a couple of years now, so I don't know if it is relevant to me at this point. Yeah, so basically, mainly a combination of those two things. I do sometimes wonder is it useful to me now that I've quite been qualified a couple of years? Is it something that I still need at this point? Yeah. (NEL08, community pharmacy)*

One came across the programme while doing some e-learning modules online but missed the deadline and did not have a chance to explore the programme further due to their busy day-to-day work as a locum.

We also asked CPPE educational supervisors why some of their learners were on pause or quit from the programme. Lack of protected learning time and being unable to commit the time due to personal or other reasons was cited as the main reason for non-engagement:

Some people have completely left the Pathway because they don't have the, well, so because the Pathway as such doesn't get allocated study time for the learners to engage with it, they, for reasons, personal reasons and other reasons, they just don't feel they can actually participate as fully as they would like to, because of busy work life balance. And obviously because this is something that is very self directed for the learners to do outside of their core hours, some people have pulled out for that reason. (S03, CPPE educational supervisor)

so one of the guys, he actually formally withdrew after about seven months. He had personal circumstances that just meant, he said, "I can't commit the time to this that I think it needs. (S04, CPPE educational supervisor)

Another reason was that a minority of newly qualified pharmacists had left the pharmacy profession:

And in fact, one or two people have pulled out because they've actually left the pharmacy profession, even within starting as a newly qualified pharmacist. Maybe it wasn't quite what they expected it to be, and have changed their, I suppose, what they're going to do in their careers. (S03, CPPE educational supervisor)

5 Integrated summary of findings

NPT constructs	NPT sub-constructs	Evaluation themes	Findings
1. Coherence	1.1. Communal specification - How did the learner, employer and supervisor collectively understand the purpose and benefits of the learning programmes?	Purpose	For newly qualified pharmacists who signed up for the learning programmes, the supervisor explained the purpose and benefits of the programmes early on. In some cases, the supervisor needed to 'sell' the programme to the learner.
	1.2. Differentiation - How did the learner and supervisor work together in everyday settings to understand and plan the learning programmes?		At the beginning of the programme, the educational supervisor would conduct an initial meeting with the learner to discuss their learning needs and support them in identifying their learning priorities.
	1.3. Individual specification - How did the learner, supervisor and employer individually understand the purpose and benefits of the learning programmes?	Purpose	<p>Most respondents to the survey (over 45%) enrolled in their learning programme to enhance their professional and clinical skills. 61.6% of respondents were motivated to enrol in their programme(s) to prepare for an independent prescribing qualification, 84.9% said they intended to work towards an independent prescribing qualification during their careers. Of these, the majority stated they planned to complete their independent prescribing qualification as part of their Postgraduate Diploma (41.9%) and some plan to separately complete this (32.3%).</p> <p>From the interviews, we found that the purpose of the learning programmes was clear to the learner, supervisor and employer in all settings, which was to support newly qualified pharmacists in their transition period from the foundation period to becoming independent practitioners by providing them with clinical, management and</p>

			leadership skills. One benefit of the programmes for learners was that is provided them with educational supervisors who could support them during the transition period. There were some specific benefits for different learners in different sectors. In community pharmacies, as they often work in isolation and could be the only pharmacist in the store, the CPPE educational supervisor also helped learners connect with other peers. Hospital pharmacy learners saw the clinical diploma as a Pathway to achieving the independent prescribing qualification and for progression to Band 7.
	1.4. Internalisation - How do learners construct the potential value of the learning programmes for their work?	Purpose	The Pathway consisted of four elements – working toward the same learning outcomes (of the RPS post-registration foundation pharmacy curriculum), access to the RPS e-portfolio, access to a suite of learning resources, and access to educational supervision. Newly qualified pharmacists valued having access to supervision provided as part of the learning programmes, but they were unclear on how to evidence their learning in the RPS e-portfolio. Lack of clarity on the purpose of recording evidence in the RPS e-portfolio were found to hamper newly qualified pharmacists' ability to adopt reflective practice as part of the process. The Pathway was intended to complement existing learning programmes. However, although learners were aware of the learning programmes they enrolled in (i.e. CPPE Newly Qualified Pharmacist Pathway, clinical diplomas, hospital in-house programmes), they were not aware of the Pathway (which comprised not only supervision but also the other three elements).
2. Cognitive participation	2.1. Initiation - How did the supervisor and employer drive the learning programmes?		For newly qualified in community pharmacies and other eligible settings, and provided they had signed up to the CPPE website and marketing emails (for those who signed up) provided information about the CPPE Newly Qualified Pharmacist Programme. For newly qualified pharmacists in hospitals, a presentation by NHSE about the Newly Qualified Pharmacist Pathway and the follow-up email from their line manager encouraged some to sign up for the Pathway, although this made some think that the programme was mandatory.

	2.2. Enrolment - How did the learner join in the learning programmes?		For the CPPE programme, learners could join through the CPPE website. For hospital programmes, learners could join via the hospital's education and training lead. Access to the RPS e-portfolio was available to all newly qualified pharmacists, whether or not they held RPS membership.
	2.3. Legitimation - How did the learner, supervisor and employer agree that the learning programme is the right thing to do and should be part of their work?	Supervision	In NHS hospitals, clinical diplomas were part of the progression to Band 7, but it was very challenging to get buy-in from community pharmacy employers. There were many challenges, including time constraints, and some learners did not see the point of the learning programmes as they were already registered pharmacists.
	2.4. Activation - How did the supervisor and employer continue to support the learning programmes?	Supervision	Funding was available from NHS England to support the supervision of newly qualified pharmacists in hospitals, with a supervisor payment of £500 per learner for 10 hours of supervision throughout the year. The CPPE Newly Qualified Pharmacist Programme was also fully funded by NHS England.
3. Collective action	3.1. Interactional workability – how did the learner, supervisor do the work required by the learning programmes?		Newly qualified pharmacists in hospitals received protected time for learning and attendance at study days, while those in community pharmacies did not and had to find time outside their work to complete the programme.
	3.2. Skill-set workability – How were the learning programmes appropriately allocated to people?	Equality, diversity and inclusion	Learning programmes were not allocated but offered to newly qualified pharmacists. Educational supervisors supported learning needs assessments and how to prioritise learning. Learners without protected learning time (mostly CPPE learners in community pharmacies) had to find the time to learn outside of work hours, which was challenging, especially after long hours and for those with caring responsibilities. CPPE supervisors also needed to be flexible with their time to accommodate learners' needs, especially locums who did not have set work hours.

	<p>3.3. Relational integration – What did the learner and supervisor do to maintain confidence in the benefits of the learning programmes?</p>		<p>Supervisors had to continuously work on reinforcing the purpose and benefits of the programmes to learners and support learners in prioritising and continuing.</p>
	<p>3.4. Contextual integration – How did the employer and supervisor support the learning programmes?</p>	<p>Supervision</p>	<p>In hospitals, learners were assigned an educational supervisor and a rotational/practice supervisor. There was a culture of learning and allowing time for this. In community pharmacies, due to a lack of staff and often being the only pharmacist in the store, newly qualified pharmacists did not have a workplace-based supervisor. They relied on and valued the support provided by their CPPE educational supervisor, which was provided remotely. Employer support, however, was often limited, particularly evidenced in the lack of study time in this setting. The frequency of supervision varied depending on how proactive the learners were. The quality and consistency of supervision also varied. CPPE supervisors received training with clarity on the purpose and structure of supervision. CPPE supervisors also had peer support, for example, through a WhatsApp group and regular meetings of CPPE educational supervisors. Hospital supervisors were commonly expected to supervise after three years in practice, sometimes without training.</p>
		<p>Resources</p>	<p>Education providers provided learners access to an e-learning platform to access the modules as part of the learning. Learners were also given access to the RPS e-portfolio and a suite of resources as part of the Pathway. Our survey showed high engagement with the RPS e-portfolio, but our interviews showed that learners had difficulty knowing how to record evidence of their learning and navigating the RPS e-portfolio. Learners found the RPS e-portfolio difficult to navigate. Moreover, since learning providers commonly had their own learning e-learning platforms, learners were confused about the purpose of having two different e-platforms. Many learners were not aware of the suite of resources provided as part of the Pathway.</p>

4. Reflexive monitoring	4.1.	How can the learning programmes be improved to ensure fair offers for learners in all sectors, all regions and backgrounds?		See Recommendations section.
	4.2.	Systematisation - How did learner obtain feedback about their progress in the learning programmes?		Learners obtained feedback about their progress through discussions with educational supervisors, guided self-reflection, workplace-based assessment and some remote assessment for CPPE learners (e.g. case-based discussions, leadership skills).
	4.3.	Individual appraisal – how did the learner, supervisor and employer individually assess the learning programmes as worthwhile?		Indirect evidence from non-engaged learners who reported lack of time as the main reason for not enrolling in any of the learning programmes. A lack of clarity on the need and purpose of the pathway also played a role.
	4.4.	Communal appraisal – how did the learner, supervisor and employer collectively assess the learning programmes as worthwhile?		In hospitals, there was some communal appraisal through the structure of clinical/rotational and educational supervisors, and education and training leads. CPPE may have used educational supervisor peer support sessions for a level of collective appraisal – but without direct employer input.
	4.5.	What were the short-term benefits and likely long-term impacts of the learning programmes on the learner, supervisor and employer?	Supervision	The learning programmes helped learners become more confident and competent practitioners, gaining clinical, management, and leadership skills. Supervision was considered an important element of this and seen as even more important in supporting newly qualified pharmacists who will be independent prescriber ready from 2026. The RPS e-portfolio was seen as a valuable tool for learners to reflect on their personal development and plan for future learning and career development/ advanced practice.
	4.6.	Reconfiguration – how did learner modify their work in response to their appraisal of the learning programmes?	Supervision	Reflective discussions should be recorded in RPS e-portfolio. However, this proved to be challenging for newly qualified pharmacists.

6 Discussion

This report provides an impact and process evaluation of the Newly Qualified Pharmacists Pathway for those pharmacists who joined the GPhC register in 2021 and 2022. We used Normalisation Process Theory as a framework that addresses the factors needed for successful implementation and integration of the Pathway into routine work (normalisation) (5). Using NPT, the evaluation assessed how learners, supervisors and employers make sense of the Pathway (in terms of its purposes and benefits, fit with other programmes and its added values); engage with, support and sustain the Pathway (in terms of supervision and resources provided); and ensure that the Pathway was part of their routine work. The evaluation also assessed the likely long-term impacts of the Pathway on both learners and employers and how to improve the offer and ensure effective communication to different sectors and newly qualified pharmacists across the diverse pharmacy workforce.

Our findings on the **challenges of transitioning to independent practice** were similar to those found by Magola (7,12,13). The transition to being an independent practitioner meant newly qualified pharmacists had a high degree of autonomy in their practice. This autonomy comes with a great deal of accountability. Many newly qualified pharmacists felt that they lacked competence and confidence in these areas. Being an independent practitioner also meant newly qualified pharmacists were accountable for their decisions. They needed to be able to manage their fear of accountability and learn how to prioritise in a high-pressure environment. Leadership was particularly challenging for newly qualified pharmacists who had to manage more experienced colleagues. However, these challenges were not specific to pharmacy and were experienced by novice doctors and nurses, although the extent of the challenges varied in different professions(6). In pharmacy, there were some sector-specific challenges(12). Newly qualified pharmacists in community pharmacies reported a lack of peer support as they are often the only pharmacists, which could be a daunting experience. They also had to juggle the responsibilities of managing a store, such as understanding the terms of service and contractual requirements of the pharmacy quality scheme. The supervision provided as part of the CPPE programme helped to fill this gap where they do not usually have access to support or structured learning.

The Pathway was designed to provide support for newly qualified pharmacists in overcoming the challenges that they faced during the transition period to become independent practitioners. **The Pathway consisted of four elements** – working towards the same learning outcomes (which was the RPS post-registration foundation pharmacy curriculum), access to the RPS e-portfolio, access to a suite of learning resources, and access to supervision. **Access to supervision varied across different settings/sectors.** In hospitals, the Pathway was intended to complement existing training programmes, such as clinical diplomas or in-house training programmes. Supervision was provided by an educational supervisor and a rotational/practice supervisor who was based in the workplace. Funding was available to employers to support supervision. For newly qualified pharmacists in a patient-facing role in community pharmacy (except Boots), general practice, community health services, health and justice and care homes, there was the Centre for Pharmacy Postgraduate Education (CPPE) Newly Qualified Pharmacist Programme. This was a 12-month structured learning programme funded by NHSE, which took a blended learning approach, combining online learning, workshops and assessments. Learners were allocated a designated CPPE education supervisor who provided supervision remotely. For newly qualified community pharmacists working in Boots UK, there was the Boots Newly Qualified Pharmacist Programme, which was accredited by the RPS. Learners were assigned to in-house Health Academy Trainers who acted as tutors to support with supervised learning events. Funding was available to Boots

to support supervision. However, due to limited engagement in the evaluation process, we have limited evaluation data on the Boots programme.

Awareness of the Pathway varied in different settings. Newly qualified pharmacists in community pharmacies knew about the CPPE Newly Qualified Pharmacist Programme from the CPPE mailing list (if they have signed up for it) or from the CPPE website for learners who were doing online learning modules with CPPE. In most hospitals, clinical diplomas were a requirement to progress to Band 7. We have no evaluation data on Boots Newly Qualified Pharmacist Programme.

Learners and supervisors have a coherent understanding of **the purpose and benefits of the learning programmes (i.e. CPPE Newly Qualified Pharmacist Programme and hospital learning programmes)**. These learning programmes were viewed as providing newly qualified pharmacists with **access to supervisors** who can support them in navigating their transition from the foundation period to becoming independent practitioners. However, as the Pathway was **non-mandatory, it lacked legitimacy in ensuring that the Pathway should be part of newly qualified pharmacists' routine work across all settings/sectors**. In most hospitals, clinical diplomas or in-house hospital programmes were a requirement for progression to Band 7; hence, learners were committed to completing the programme. Newly qualified pharmacists in hospitals received emails from their line managers encouraging them to sign up for the Pathway, which made some of them think that the programme was mandatory. The CPPE programme was not mandatory for newly qualified pharmacists in community pharmacies, general practice, community health services, health and justice and care homes. Whilst those few who had signed up to the CPPE programme were clear about its purpose and found it beneficial. There were many other eligible pharmacists who had not enrolled, with a lack of time and a limited understanding/ appreciation of the purpose and potential benefits of the Pathway being important reasons for this. Furthermore, there was typically no learning time or employer support. Evaluation of the Interim Foundation Pharmacist Programme found that those who signed up because their employer asked them to were less likely to have found the programme useful(14). This suggests that it is important for learners to be intrinsically motivated to do the learning, especially for those in community pharmacies where they had to do the learning in their own time.

In terms of **supervision**, in hospitals, newly qualified pharmacists were assigned two types of supervisors: an educational supervisor and a rotational/practice supervisor; both were workplace-based. In community pharmacies, if enrolled on the CPPE pathway, newly qualified pharmacists were allocated a CPPE educational supervisor, whom they met remotely and whose support they valued. The role of educational supervisors included supporting newly qualified in identifying their learning needs, developing a personal development plan, completing end-of-module reviews and conducting supervised learning events/workplace-based assessments. This finding echoed what was found by Style et al., whereby educational supervisors provided both formative (educational) support, which focused on monitoring and quality assurance, and pastoral support, which focused on the development of knowledge and skills(15). The role of rotational/practice supervisors, who tended to be clinicians or specialists in the specific area of practice of the rotation, was to support and observe the learner's day-to-day clinical practice. They would give feedback on their observations to the educational supervisor. Learners obtained feedback about their progress on the learning programmes through discussions with educational supervisors, guided self-reflection and workplace-based/remote assessment. **To ensure that learners remain committed to completing the programme**, educational supervisors needed to communicate the purpose of the learning programmes to learners early on and throughout the programmes. A visit report of the Foundation Pharmacist Training in North of England

NHS Trusts also found the importance of having access to appropriate and timely induction in supporting new starters during their transition period into professional practice(16).

Most learners met their supervisor monthly. Pre-arranging the supervision meetings helped to ensure that most learners received the support they needed. Our evaluation found that **the quality of supervision varied across different settings/sectors**. Hospital supervisors were expected to supervise after three years of practice, sometimes without training. On the other hand, CPPE supervisors received comprehensive training delivered by CPPE(17). They also had peer support through a WhatsApp group and regular meetings with other CPPE educational supervisors. Supervision was found to be important for facilitating learning as it enabled the application of learning in practice, facilitated competence in advanced skills, and supported confidence to use these skills in direct patient care(15). However, supervision was often viewed as an additional role rather than an essential part of being a pharmacist(15). **Our evaluation highlights that supervision will become more important as newly qualified pharmacists become independent prescribers in 2026**. However, processes and infrastructure are lacking in pharmacy compared to other healthcare professions such as medicine and nursing. Lessons can be learned from a model established and used by CPPE for their educational supervisor(17).

In addition to supervision, the Pathway also provided learners with **access to the RPS e-portfolio and a suite of learning resources**, which were mapped against the new curriculum domains (communication and collaborative working, professional practice, leadership and management, education and research). **Our evaluation found that there was a lack of clarity on the purpose of recording evidence in the RPS e-portfolio, which had been found to hamper newly qualified pharmacists' ability to adopt reflective practice**. An evaluation of the Interim Foundation Pharmacist Programme had similarly found that lack of clarity about how much work learners need to upload to the RPS e-portfolio, whether learners' work would be assessed, and issues with navigating the RPS e-portfolio had hindered many learners from realising the benefit of RPS e-portfolio as a mechanism for reflective practice(14).

One of the main challenges for learners in the Pathway was the **lack of protected learning time**, especially for those working in community pharmacies. Learners in hospitals were given study days to attend modules on clinical diplomas. On the other hand, learners in community pharmacies had to find the time outside of work hours to attend modules on the CPPE Newly Qualified Pharmacist Programme. This could have an impact on equality and inclusion, especially for those with caring responsibilities. Our evaluation found lack of time was the main reason for non-engagement with any of the learning programmes, especially for those in community pharmacies. Similar findings were found in the evaluation of the Interim Foundation Pharmacist Programme, which reported learners withdrawing from the programme due to difficulties combining learning with their workload and other responsibilities(14).

Differences in work-based experiences between hospitals and community pharmacies are well evidenced(18). Professional isolation, which is common in community pharmacies, has been found to make it difficult for newly qualified to feel part of a 'learning community'(7). Our evaluation found **varied levels of experiences amongst learners in different settings**. This was similar to what was found in Jee et al.'s longitudinal study of pharmacy trainees and their tutors, which found that training experiences and exposure varied across settings. This raised concerns about the robustness and equity of foundation training and questioned whether a single-sector trainer could provide trainees with the range of competencies needed to be a day-one pharmacist(19). However, cross-sector training has been found to overcome some of these challenges to achieve intended learning outcomes(20,21).

Many learners were unaware of the suite of resources provided as part of the Pathway. Learners used the resources and e-learning platforms supplied by the education providers. Learners who had experience using the RPS e-portfolio (as part of their foundation training in England) found it easier to navigate than those who had not. Some clinical diplomas had begun to incorporate the RPS e-portfolio, which created a more seamless integration for learners. The presence of multiple resources and e-platforms without a clear differentiation of their purposes was overwhelming for learners.

7 Recommendations

1. Leadership is needed from the profession to clearly articulate the vision and purpose of the Newly Qualified Pharmacist Pathway and where this sits in the progression from novice to proficient and advanced practitioner. This is to ensure that learners, supervisors and employers understand the expectations of the Pathway. This vision should include a set of common objectives aligned with the needs of the profession and the NHS and be supported by a governance framework and accountability mechanisms.
2. It is important to articulate that newly qualified pharmacists should not be expected to be fully formed practitioners at the point of registration, just as in other professions. This is likely to be even more relevant from 2026, when pharmacists will qualify as independent prescribers at the point of registration. There needs to be a clear pathway for newly qualified pharmacists that prepare them for the next steps in their careers, including independent prescribing, advanced practice and credentialing.
3. Embed reflective practice and its evidencing into pharmacists' practice. This will help to create a culture of lifelong learning in the pharmacy profession, where pharmacists are supported by their employers and given protected learning time to integrate continuous development and learning into their work.
4. Implement a standardised e-portfolio across learning programmes to provide consistent benchmarks for all newly qualified pharmacists, regardless of the settings/sectors and the learning programmes.
5. Develop a national framework for educational supervision in pharmacy that provides guidance on best practices, outlines the roles and responsibilities of supervisors, and aligns with the needs of newly qualified pharmacists. The framework should also include establishing and maintaining effective peer support networks.

8 References

1. General Pharmaceutical Council. Initial education and training for pharmacists [Internet]. 2021 [cited 2022 Feb 22]. Available from: <https://www.pharmacyregulation.org/initial-training>
2. Post-Registration Foundation Curriculum [Internet]. [cited 2023 Sep 19]. Available from: <https://www.rpharms.com/development/credentialing/post-registration-foundation/post-registration-foundation-curriculum>
3. Royal Pharmaceutical Society. Newly Qualified Pharmacist pathway [Internet]. [cited 2023 Sep 19]. Available from: <https://www.rpharms.com/development/credentialing/post-registration-foundation/post-registration-foundation-curriculum/post-registration-foundation-e-portfolio/hee-newly-qualified-pharmacist-pathway>
4. Health Education England. Health Education England. 2021 [cited 2023 Sep 19]. Newly Qualified Pharmacist pathway resource library. Available from: <https://www.hee.nhs.uk/our-work/pharmacy/initial-education-training-pharmacists-reform-programme/newly-qualified-pharmacist-pathway/newly-qualified-pharmacist-pathway-library>
5. Murray E, Treweek S, Pope C, MacFarlane A, Ballini L, Dowrick C, et al. Normalisation process theory: a framework for developing, evaluating and implementing complex interventions. *BMC Med*. 2010 Oct 20;8(1):63.
6. Magola E, Willis SC, Schafheutle EI. What can community pharmacy learn from the experiences of transition to practice for novice doctors and nurses? A narrative review. *Int J Pharm Pract*. 2018;26(1):4–15.
7. Magola, Esnath. Identifying the challenges faced by novice community pharmacists and developing a peer support intervention to ease their transitions to independent practitioners. University of Manchester; 2018.
8. Jabbar, Bilal. Equality, diversity and inclusion: A literature review of current research relating to pharmacists, focusing on ethnicity protected characteristics and early career development. Health Education England; 2021 Dec.
9. General Pharmaceutical Council. Survey of registered pharmacy professionals 2019: Main report. 2019.
10. Seston EM, Fegan T, Hassell K, Schafheutle EI. Black and minority ethnic pharmacists' treatment in the UK: A systematic review. *Res Soc Adm Pharm*. 2015 Nov 1;11(6):749–68.
11. Howells K, Bower P, Hassell K. Exploring the career choices of White and Black, Asian and Minority Ethnic women pharmacists: a qualitative study. *Int J Pharm Pract*. 2018 Dec 1;26(6):507–14.
12. Magola E, Willis SC, Schafheutle EI. Community pharmacists at transition to independent practice: Isolated, unsupported, and stressed. *Health Soc Care Community*. 2018;26(6):849–59.
13. Jee SD, Schafheutle EI, Noyce PR. Using longitudinal mixed methods to study the development of professional behaviours during pharmacy work-based training. *Health Soc Care Community*. 2017;25(3):975–86.
14. IFF research, Health Education England. Supporting provisionally registered pharmacists through a challenging year: An evaluation of the Interim Foundation Pharmacist Programme Evaluation final report. Prepared by IFF Research for Health Education England. 2021 Dec.
15. Styles M, Schafheutle E, Willis S, Shaw M. Pharmacy professionals' perceptions of educational supervision in primary care through the lens of Proctor's model. *BMC Med Educ*. 2023 Jul 12;23(1):503.

16. Health Education England. Visit report: Foundation Pharmacists Training (North of England NHS Trusts).
17. Styles M, Middleton H, Schafheutle E, Shaw M. Educational supervision to support pharmacy professionals' learning and practice of advanced roles. *Int J Clin Pharm*. 2022 Jun 1;44(3):781–6.
18. Schafheutle EI, Jee SD, Willis SC. The influence of learning environment on trainee pharmacy technicians' education and training experiences. *Res Soc Adm Pharm*. 2018 Nov 1;14(11):1020–6.
19. Jee DS. The quality of pharmacy technician education and training. :181.
20. Hindi AMK, Willis SC, Schafheutle EI. Cross-sector pre-registration trainee pharmacist placements in general practice across England: A qualitative study exploring the views of pre-registration trainees and education supervisors. *Health Soc Care Community*. 2022;30(6):2330–40.
21. Hindi AMK, Willis SC, Schafheutle EI. Using communities of practice as a lens for exploring experiential pharmacy learning in general practice: Are communities of practice the way forward in changing the training culture in pharmacy? *BMC Med Educ*. 2022 Dec 3;22(1):12.