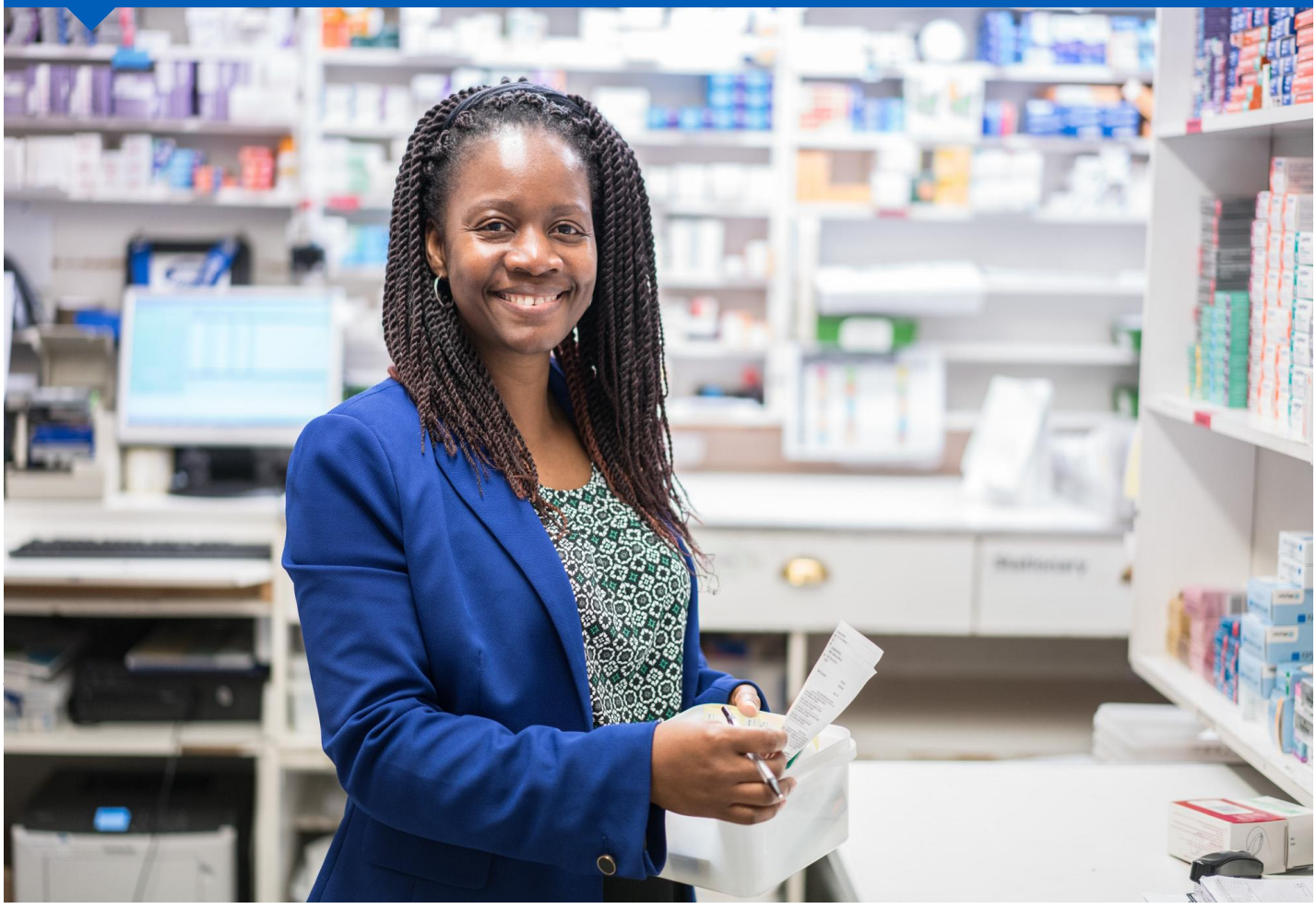
cpws The Centre For Pharmacy Workforce Studies

Division of Pharmacy and Optometry, The University of Manchester

NHS

Health Education England

Evaluation of the Integrated Pre-Registration Trainee Pharmacy Technician Training Pilot



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Key findings

- The Pre-registration Trainee Pharmacy Technician integrated training pilot has achieved most of its intended benefits, such as improved understanding of how different sectors work, transfer of care issues, and opportunities to work as part of a multidisciplinary team. However, there was a lack of consistency in PTPTs' experiences and learning. This was associated with variation in understanding of what PTPTs are, what they can do and what the programme expectations are in term of what was expected of them, their supervisors, employing organisations and placement organisations.
- PTPTs had mixed supervision experiences. Although COVID-19 compounded some of these, much variation was due to factors such as supervisors' knowledge and skills to support learning, the structure and frequency of supervision sessions and how supervision was delivered in practice.
- The evaluation found that cross-sector PTPTs felt significantly more prepared than single-sector PTPTs to work in all other sectors.

Executive summary

Health Education England commissioned the Centre for Pharmacy Workforce Studies[a] at the University of Manchester to undertake the delivery of the Evaluation of the Pre-registration Trainee Pharmacy Technician (PTPT) Integrated Training Pilot. This was to inform future PTPT recruitment and training across the healthcare system.

The Pre-registration Trainee Pharmacy Technician (PTPT) Integrated Training was a two-year national pilot programme (February 2020 to February 2022) developed to be aligned with the new General Pharmaceutical Council (GPhC) Initial Education and Training (IET) Standards, funded by the Pharmacy Integration Fund (PhIF). The pilot aimed to support the development of a new education model to ensure a sustainable pipeline of pharmacy technicians who are competent and confident to deliver the objectives of the NHS Long Term Plan, across different care settings. It is important to note that the national lockdown due to COVID-19 came into effect in March 2020, just after the pilot had started. This had a substantial impact on the pilot, affecting the setting up of partnerships and PTPTs placements.

To deliver the programme, partnerships were formed between an employing organisation and two to three placement partners. PTPTs were placed for a minimum of 12 weeks in at least three settings a year (community pharmacy, general practice, care homes, secondary care, community mental health, and clinical commissioning groups). The pilot intention was to recruit 48 PTPTs. At the time of evaluation in 2021/22, there were 35 PTPTs in the pilot, 21 educational supervisors (responsible for overseeing the two-year training programme) and up to 50 practice supervisors (responsible for overseeing a specified PTPT's work during the period of training spent in their setting/workplace). Supervisors were pharmacy professionals (pharmacists or pharmacy technicians). PTPTs attended the same further education college remotely one day a week during term time.

The **aim of this evaluation** was to understand PTPTs' experiences of the programme, addressing the question of impact and added value through the perspectives of PTPTs and supervisors. The evaluation utilised a mixed-methods approach combining interviews with two surveys. Semi-structured interviews were conducted (August-October 2021) with PTPTs (n=14) and both educational and practice supervisors (n=15). A survey capturing PTPTs' views on their supervision was conducted in September 2022. A second survey was conducted at the end of the pilot (January 2022), completed by cross-sector and single-sector PTPTs to compare PTPTs career intentions and preparedness to practise as a pharmacy technician.

Findings

Placement structure varied, with PTPTs placed in block placements (3-6 months), split week placements (1-2 days per week), or a combination. There was no preference for type of placement structure, with local context and need guiding what was put in place. PTPTs' **assessments**

[a] Centre for Pharmacy Workforce Studies: https://sites.manchester.ac.uk/cpws/

involved direct observation in the workplace by the college assessor (i.e., pharmacist or pharmacy technician), some conducted virtually, and some conducted in-house by a qualified assessor. PTPTs submitted evidence demonstrating how they had achieved GPhC learning outcomes (evidence framework), which were signed-off by expert witness testimonies, usually practice supervisors. PTPTs found the coursework very beneficial, and they felt supported by college tutors and assessors. However, PTPTs reported struggling with finding time to do their coursework, which they did mostly in their own time, due to little or no protected time during placements, with differences between settings/sectors.

PTPTs received **support from educational and practice supervisors.** PTPTs reported that their educational supervisors were easily reached via telephone, email or messaging when needed. Practice supervisors regularly checked PTPTs' evidence logs and had regular meetings to discuss progress and identify further learning needs. Regular communication between educational and practice supervisors was seen as important to ensure coordinated learning and support plans were in place to address the GPhC learning outcomes. However, this occurred very rarely due to difficulty for supervisors to find time in their already busy day-to-day work.

Support from HEE regional facilitators were seen as essential to educational supervisors, who saw them as the go-to person for any questions, issues or concerns.

The pilot achieved most of its intended benefits. PTPTs reported an improved understanding of how different sectors work, transfer of care issues and the patient journey and having good opportunities to engage with a wide range of healthcare professionals. PTPTs and supervisors reported PTPTs having increased confidence in carrying out different tasks in different sectors. This was further supported by the survey findings which showed that **cross-sector PTPTs felt significantly more prepared than single-sector PTPTs to work in all other sectors.** However, there was a lack of consistency of PTPTs' experiences and learning. This was due to a **lack of understanding of what PTPTs were, what they could do, and what the overall programme expectations were**.

Supervision was an important aspect of the programme. PTPTs with good access to their practice supervisors reported positive supervision experiences which helped with their learning. However, some PTPTs reported that practice supervisors did not always have time to support them, which was viewed as hampering PTPTs' progress, for example in terms of the lack of placement review and competencies not being signed off on time. Although COVID-19 compounded some of these, much variation was due to how supervision was delivered in practice.

Challenges in implementing the pilot included infrastructure (e.g., not having space, dedicated learning time, and resources conducive for learning in some settings) and inconsistency of supervision. External factors such being a pilot delivering a new qualification meeting to new GPhC IET standards, and COVID-19 created additional challenges.

Recommendations

- To ensure the integrated training model can be implemented at scale, there needs to be a clear understanding of what the programme will deliver. Expectations need to be effectively managed for organisations and individuals involved by clearly setting out:
    - PTPT programme objectives to help structure learning plans whilst allowing for flexibility to accommodate for PTPTs' learning needs and variation of placement combinations that suit the needs of different sectors and partnership arrangements
    - What HEE funding covers and what support HEE provide.
    - Training, resource and time commitments from the employing organisation and placement partners, including supervisors in all settings.
    - The role of pharmacy technicians (which PTPTs are training to become), and what PTPTs' level of knowledge and competence should be at various stages of the programme, and what they are expected to achieve *upon completion* of the programme. Specific clarity on what should be covered in each type of setting are also important.
- A guidance/framework that underpins the training arrangements/requirements will be beneficial to ensure consistency across different sectors. Information on what PTPTs learn from their learning provider(s) (e.g., College) will support effective application in practice/workplace.
- Clarity is needed around the roles and responsibilities of the employing organisation and education supervisors, as well as placement organisations and their practice supervisors. Regular communication between educational and practice supervisors will be important to facilitate overall achievement of PTPTs' learning outcomes.
- Supervision requires a significant time commitment by both educational and practice supervisors. Supervisors need to have the knowledge and skills to design a learning plan that facilitates effective work-based learning and application.

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1. Introduction

This section introduces the policy context for the PTPT Integrated Training Pilot, drivers for change in education and training, and outlines the aims of the evaluation.

3.1 Background

An ageing population living with increasingly complex health needs has resulted in increased patient demand and unprecedented workload pressures on primary and secondary care.[1] The UK Government recognises the need to utilise the pharmacy profession to address the challenges faced by the NHS in delivering patient care. The landscape of the pharmacy workforce is rapidly changing with the evolution of the pharmacy team in response to the Five Year Forward View and more recently the NHS Long Term Plan.[1,2] The vision for pharmacy includes a pharmacy workforce able to work across integrated care pathways and providing clinical, patient-centred care. To enable this change, the importance of cross-sector training for the pharmacy workforce has been recognised.[3–5] The NHS has invested in capacity building of pharmacists and pharmacy technicians.

The pharmacy technician workforce is recognised as essential within pharmacy and multidisciplinary skill mix and to deliver transformation required across the health and social care.[1,3,6] There is a clear need to grow this workforce and ensure that the future supply is suitably trained to practise across settings/ sectors, including a number of additional new roles in a range of primary care settings such as Primary Care Networks (PCNs), general practice, mental health trusts and Clinical Commissioning Groups (CCGs). This supports the development of a workforce capable of working across the healthcare system, providing pharmacy technicians with an enhanced understanding of issues around transfer of care between sectors.

In the past years, education and training for pharmacy technicians has undergone changes. Historically, pharmacy technicians were not a registered profession, with voluntary registration introduced in 2005. Registration became mandatory in 2011, with ‘pharmacy technician’ at that time becoming a ‘protected title’, meaning that only those on the General Pharmaceutical Council (GPhC) register could call themselves pharmacy technicians.[4] There was a period of time that allowed those who had previously worked as pharmacy technicians to join the GPhC register following a range of qualifications – via the so-called’ ‘grandparenting clause’. Traditionally, the initial education and training of pharmacy technicians has been mainly undertaken in a single sector (usually either community or hospital pharmacy). Key differences have existed between the training experiences in these two sectors.[6,7]

In September 2010, the GPhC set standards for the Initial Education and Training (IET) of pharmacy technicians.[8] New GPhC IET standards for pharmacy technicians were published in 2017, which put particular emphasis on person-centred professionalism, communication and team working, stressing the importance of integration of learning and experience during the period of

initial education and training.[7] These GPhC IET standards also stipulate that those wanting to register as pharmacy technicians must complete approved knowledge and competency training programmes and need to undertake a minimum of two years' relevant work-based experience under the supervision of a pharmacist or pharmacy technician for no less than 14 hours per week. The GPhC sets their standards for the initial education and training of pharmacy technicians in two parts. The first part is the learning outcomes, which a pre-registration training pharmacy technician must achieve by the end of their training. The learning outcomes fall under four domains: person-centred, professionalism, professional knowledge and skills and collaboration. The second part is the standards for training course providers, which sets out the key features of courses delivering the learning outcomes. These standards set out the curriculum requirements for a combined competency- and knowledge-based qualifications, containing detail on learning hours and outcomes.[6,9]

3.2 Pre-registration trainee pharmacy technician (PTPT) integrated training pilot

This national pilot ran for two years, from February 2020 to February 2022. The pilot was funded by the Pharmacy Integration Fund (PhIF), a national programme to support the development of pharmacy professionals through a partnership arrangement between Health Education England (HEE) and NHS England and NHS Improvement (NHSE/I).

The pilot aimed to support future workforce needs in new and expanding roles, such as primary care, through structured training models that meet the GPhC evidence framework.[9]

1.2.1 Intended benefits

The intended benefits of this cross-sector[b] training model included:

1. Contribution to the development of a flexible pharmacy technician workforce, who is better prepared to deliver enhanced integrated cross-sector healthcare system services for patients and the public.

2. Equipping PTPTs with a broader skillset, allowing them to better support service delivery to patients and the public across all healthcare systems.

3. Improved understanding of the transfer of care issues and how to support patients as they transition between care settings.

4. Enhanced relationships between partners supporting the development of primary care networks and integrated care systems.

5. Increased awareness of barriers and difficulties with communication and transfer of care and how to resolve them.

[b] The term 'cross-sector' is used interchangeably with the term 'integrated'.

1.2.2 Cross-sector training approach and pilot framework

The pilot was intended to address the cross-sector training need to deliver the NHS vision by recruiting 48 PTPTs to multi-sector training posts, including community pharmacy, general practice, care homes, secondary care and community mental health. The employing organisation formed partnerships with placement partners to recruit PTPTs. Partnerships were intended to be between the employing employer and at least two other sectors.

PTPTs in the pilot completed a two-year education programme (Level 3 Diploma in the Principles and Practice for Pharmacy Technicians), this was commissioned by HEE. PTPTs were placed for a minimum of 12 weeks in a minimum of three settings a year (secondary care, community mental health, community pharmacy, general practice, care homes and clinical commissioning groups). PTPTs were required to rotate through each sector at least once during each year of the two-year training programme. All the PTPTs attended the same further and higher education college online for one day a week during academic term time. Upon successfully completion of the diploma, and meeting registration requirements, PTPTs register with the General Pharmaceutical Council (GPhC) as a pharmacy technician.

The employing organisation signed a Memorandum of Understanding with HEE, which detailed PTPT provisions required and the role and responsibility of the employing organisation, partners, educational supervisor and practice supervisors. HEE gave the employing organisation contribution towards the costs of training and supervision in the workplace. How the employing organisation utilised this contribution and shared it within the partnership was decided by the partnership.

1.2.3 Who was involved in the pilot?

The pilot recruited 40 PTPTs in 2020. At the time of completing this evaluation in 2022, 35 PTPTs, 21 educational supervisors and up to 50 practice supervisors were involved. The educational supervisor was responsible for the overall supervision and management of a specified PTPT's progress throughout the two-year pilot and was usually based at the employing organisation. The practice supervisor was a supervisor in the workplace of each rotation and was responsible for overseeing a specified PTPT's work and providing developmental feedback during the period of training spent in their setting/workplace. Whilst working within the employing organisation, the educational supervisor commonly acts as a practice supervisor. All supervisors, educational and practice, were pharmacy professionals (pharmacists or pharmacy technicians). A PTPT would typically have one educational supervisor and several practice supervisors, depending on the number of placements. To support the pilot, HEE employed regional facilitators who came into post in April/May 2020. Regional facilitators were responsible for supporting the educational supervisors and managing the education contract.

1.3 Aim of the evaluation

The **aim of this evaluation** was to understand PTPTs' experiences of the training programme and learning under the new GPhC Initial Education & Training standards for pharmacy technicians,

addressing the question of impact and added value through the perspectives of PTPTs and supervisors. The findings from the evaluation are intended to be used to inform future PTPT training and to operationalise future roll-out.

The objectives of this evaluation were to:

- Describe the lived experiences of PTPTs and their supervisors of the integrated training pilot (Section 3-8)
- Describe how supervision was delivered during the pilot (Section 0 and 0)
- Explore the support that PTPTs received during their training (Section 4)
- Explore the extent to which the pilot has achieved its intended benefits (Section 0 and 0).
- Identify challenges in implementing the pilot (Section 0).
- Explore the impact of COVID-19 on the pilot (Section 1.4).

1.4 Impact of COVID-19 on the overall pilot

The national lockdown due to COVID-19 came into effect in March 2020, just after the pilot had started. The impact of Covid-19 pandemic and the workplace environment in healthcare had a significant impact on the delivery of the pilot. The pandemic had a substantial impact on the PTPTs' day-to-day work and training in all sectors due to considerable staff shortages caused by sickness and redeployment or changes to working practices in lockdown. Employers were unable to support or supervise the PTPTs as they had previously, and training had to be limited to ensure the safety of the PTPTs and divert resources to support the response to the pandemic. **Section 6.1** describes how COVID-19 affected the PTPTs' and supervisors' experience of the pilot.

2. Evaluation methods

The evaluation utilised a mixed-methods approach, using qualitative interviews, quantitative surveys and documentary analysis.

To inform evaluation design and programme understanding, the research team started by conducting **key informant interviews** (April-June 2021) and **analysing anonymised expression of interests (EoIs)** submitted by the partnerships (June 2021). Interviews were conducted with the commissioners (n=5) and representatives from the education provider (n=2). The purpose of the interviews was to provide background information about the pilot and understand contextual details such as the partnership arrangements and placement models which was used to guide the evaluation design. HEE provided the research team with a summary of anonymised EoIs (n=63). The summary EoIs provided details on the employing organisation, partners, number of PTPTs they expected to recruit, placement model and details of educational and practice supervisors (such as job title and years of experience of working in the sector as a registered pharmacy professional and supporting pharmacy technicians).

Semi-structured interviews (August-October 2021) were conducted with PTPTs (n=14) and supervisors (both educational and practice supervisors) (n=15) (**Table 1**). Interviews came from the following sectors: seven GP practices, one community pharmacy, one CCG and 20 hospitals. The purpose of PTPT interviews was to explore PTPTs' learning and practice experiences over their two-year training. The purpose of supervisor interviews was to explore supervisors' views on supervision models/delivery and the impact on the PTPTs in terms of developing skill sets to meet operational needs and the benefit of placements.

Participants were recruited to ensure that our interviews covered a wide range of situational variables such as regions, sectors (i.e., secondary care, community mental health, community pharmacy, general practice, care homes, and others, such as Primary Care Networks, Clinical Commissioning Groups etc.) and any organisational details available, particularly placement type (e.g. single/multiple block or split).

Table 1: Number of interviews

Role	HEE regions				Total number of interviews conducted
	South	London & SE	Midlands & East	North	
Supervisors	2	7	3	3	**15**
PTPTs	4	4	4	2	**14**

Two **surveys** were distributed to PTPTs. Distribution of both surveys was facilitated by the education provider, with PTPTs given time during their college day to complete the survey, whilst being clear that completion was voluntary. Email reminders were sent to encourage survey completion. The **first survey** (T1) was administered in September 2021 to PTPTs (n=33 responded) and sought to understand how supervision was delivered in practice within the PTPT pilot. Many of the survey items were taken from "the Supervisory Relationship Questionnaire" (SRQ), a validated and reliable survey instrument which measures the supervisory relationship from the supervisee perspective.[10] The SRQ is divided into 6 domains (safe base, structure, commitment, reflective education, role model, formative feedback) which cover the 'facilitative' and 'evaluative' functions of supervision. Given the relative importance of these supervision functions to PTPTs training experiences, items from the SRQ were used for this evaluation.

The **second survey** (T2) was conducted in January 2022 to understand PTPTs' career intentions, and preparedness to practise. The survey was sent to the same cross-sector PTPTs who completed the first survey (n=31 responded) and a cohort of single sector PTPTs (not previously surveyed) (n=39 responded) for comparison. Both groups attend the same college for their formal training.

Quantitative data were entered onto SPSS version 25 and analysed using descriptive statistics. The total SRQ score used in survey 1 for educational supervision was derived by calculating the average score for SRQ items on educational supervision. The total SRQ score for clinical/placement supervision was derived by calculating the average score for SRQ items on clinical/placement supervision for placements 1, 2 and 3. Mean scores for each subscale were obtained by dividing total score on each subscale by its respective number of items. Further statistical analysis was not possible due to the low number of responses and lack of variation in the responses. In survey 1, PTPTs were asked open questions about their experience in the workplace during training including supervision, support, study time, and resources. Open-ended questions were analysed thematically to identify commonly reoccurring themes.

This study received ethical approval from the University of Manchester by the Proportionate Review Committee [UREC ref no: 2021-12591-20285]. The exit survey for single sector PTPTs was judged by the University of Manchester's Research Ethics Manager to be exempt from requiring formal ethical review.

The report begins by presenting findings from an analysis of Expression of Interests, followed by interviews and surveys. The discussion summarises the overall findings and discusses these findings in relation to past evaluations of similar initiatives. The report concludes with recommendations to help shape the implementation of the pilot at scale.

3. Programme delivery

The findings presented in this section draw from analysis of Expression of Interests (EoIs) and interviews to provide insights into how the integrated partnership were structured, the experiences of educational supervisors in setting up the partnership and the experiences of PTPTs and supervisors during placements. Quotes are used throughout this section to illustrate key findings.

3.1 Integrated partnerships

Our analysis of 63 EoIs showed that hospitals were the employing organisation in most applications (n=24). This was followed by general practices (n=22), community pharmacies (n=8) and others (n=9). Other employing organisation included commissioning support unit, community mental health trust, GP Federation and Primary Care Network (PCN). Some EoIs were made by the Integrated Care System (ICC) with the system supporting the development of the partnership.

In the EoIs, most partnerships intended to accept 1-2 PTPTs. Only a small handful of applications mentioned willingness to accept 5-10 PTPTs. The duration of placement varied widely, ranging from 3-9 months with the employing organisation and 3-4 months with the partners. The placement structure proposed was mostly block placements with some split weeks, although a minority stated that they planned for flexible placements.

Employing organisations were asked if they had identified an educational supervisor and practice supervisors. Most employing organisation (52 out of 63) had identified their educational supervisors but not necessarily the practice supervisors. Most educational supervisors had been working in their current sector as registered pharmacy professionals for more than three years. The experience of educational supervisors having supported pharmacy technicians in the past varied widely.

The EoI analysis showed that most partnerships consisted of 3-4 partners. Our interviews with the educational supervisors suggested that the 'ideal' maximum number of partners was three, as four was too challenging for PTPTs:

> **"I think four partnerships was a bit too much, I think the maximum should be three** because if they are rotating every three months, it seems like if you don't use it, you lose it and it's that getting used to four different sites of processes, standard operating procedures, getting used to their way of working. Then by the time you settle in, you then have to rotate on, so I think my suggestion would be having a maximum cut-off of three providers. So, you're spending four months, rather than three months and you would have a little bit more time to complete your objectives and you're not so unsettled." (Educational supervisor, ID6, Hospital)

Partnerships involving two partners from the same or similar sector were viewed as not providing PTPTs with varied learning opportunities:

> "We [the employing organisation] learnt quickly that yes, although an acute hospital and a mental health hospital are different, we have many similarities when it comes to skills that you develop to work with customers and so on. We quickly learnt that having two GP practices wasn't a good idea as well, and they were just doing similar things, the same things at a different GP practice." (Educational supervisor, ID5, Hospital)

A key challenge for participating employers was in building networks for partnerships/placements in a short space of time. While HEE facilitated the formation of partnerships through stakeholder meetings at the start of the pilot, those who did not have access to an existing network found the process and timelines especially challenging:

> "Because we'd never done anything like that, there wasn't a lot of support with regards to how to set it up. So, it was creating the networks**, I didn't really have any kind of network available to get the different sectors involved**, so it was almost trying to phone around and try and see if there was interest from anywhere and building that up, but obviously because **it was such a short turnaround time**, that was really difficult." (Educational supervisor, ID9, Hospital)

One suggestion was to establish more localised meetings to build local networks:

> "I'm just thinking from experience from the [HEE] stakeholder meetings… I think sometimes there's often so many people on **there, you don't feel like you can actually make contact with, maybe, the people that are local to you that could be stakeholders**. Maybe looking at trying to set up local…more localised meetings**."** (Educational supervisor, ID9, Hospital)

3.2 Placement structure

PTPTs were placed in either a block placement, a split week placement, or a combination of both. Our interviews with supervisors and PTPTs found that for a split week placement, PTPTs would spend 1-2 days per week in each sector:

> "On a Monday, I'm in the community pharmacy, on a Tuesday and Wednesday, I'm at the hospital, because that's my…I don't know how to word it, but like my main area [placement at the employing organisation], Tuesday, Wednesday. On the Thursday, I have college […], and then on a Friday, I'm at my GP placement. […] so that's every week for the year, and then in my first year…I was Monday, community pharmacy, Tuesday, college, Wednesday, GP practice and Thursday, Friday, hospital." (PTPT, ID18, Hospital)

Block placements were generally split equally, with PTPTs spending between 3-6 months in each sector depending on the number of placements. In some cases, when block placement duration was not equally split, this was due to PTPTs' experience (or lack of experience) in a certain sector. An educational supervisor explained that they decided to provide a longer placement in community pharmacy for their PTPT (six months in community pharmacy, four months in hospital and two months in GP practice) because their PTPT had no pharmacy experience and hence needed to

focus their learning on the core role of a pharmacy technician, which was dispensing, before gaining further skills. This shows a learner-centred approach and the need for flexibility in how placements are organised to offer benefits to the PTPT:

> "Some of my students had no ... pharmacy background whatsoever and they needed to learn how to dispense and be actively involved in a community pharmacy right from the beginning, 'cause the bread-and-butter role of a pharmacy technician is to be able to dispense. And then looking forward for future skills, they've got to build on those basic skills to give them that confidence to go forward to check, in the second year of their training." (Educational supervisor, ID3, Hospital)

Supervisors and PTPTs identified the advantages and disadvantages of split and block placements. Some felt a block placement could help PTPTs feel more settled and competent in an area of work. However, if a block placement was too long, such as a 6-month placement, there was concern that PTPTs might forget what they had learned in previous placements:

> "With the three months blocks, although it was nice to have a long period of time in each place, when I went back there the second time, I'd forgot…not forgot a lot of it, but felt a bit more out of place 'because I hadn't been there in such a long time.... **Being able to do it every week means I'm getting better at it and I'm not losing, sort of, my process of dispensing and checking,** if that makes sense? […] it's the same with the hospitals doing medicines reconciliation, if I'm not there for a long period of time I do forget like the little things that you have to remember .. So, **it's nice to be able to not have long periods of time away from each place**." (PTPT, ID21, Hospital)

With a block placement, there was a concern that PTPTs might miss out on some aspects which are seasonal such as flu vaccines in winter in community pharmacy:

> "My first feelings were, are the students going to be a jack of all trades, master of none. […] You do miss out on some aspects of community training because you need to have an all year round seasonal look at: flu vaccines in the winters." (Practice supervisor, ID11, Hospital)

PTPTs' previous work experience in pharmacy influenced how they managed the transition between placements. Many PTPTs claimed that their previous work experience had helped them in understanding how the system worked in a particular sector:

> "I think I was quite lucky because I had some hospital experience behind me anyway. So, I was quite lucky in that sense, so I sort of knew the standards there, and everything." (PTPT, ID24, Hospital)

> "I know some other students have not had any hospital experience, so when we've completed like a stores' assignment about distribution, because I

had two years' experience in hospital prior to starting the course, my knowledge of this area was quite sufficient. So, I was in a bit more of an advanced situation, shall we say, compared to somebody who had no experience." (PTPT, ID23, Hospital)

For PTPTs with no previous work experience, they highlighted the importance of staff being supportive and understanding of their role and/or level of competence:

"Going into community, they were aware that I'd never worked there before, and they did help me settle in, in that sense, you know? And then from the start, they did take their time to help me understand everything. The same in GP as well, they were good about it as well…Obviously, they understand that, having never worked I'm not going to always know everything in that sense." (PTPT, ID27, Hospital)

4 The learning programme

This section presents findings from interviews with PTPTs and supervisors, providing insights into PTPTs' experiences of the education programme delivery and assessment and the supervision and support that PTPTs received during their placements, focusing on the roles of educational and practice supervisors.

4.1 Education programme delivery and assessment

PTPTs attended college one day a week during academic term time via an online learning platform. All PTPTs agreed that attending college courses from home was convenient as it meant that it was easier for the PTPT to juggle work-life balance:

> "When we first started the course, we used to have to go into the hospital to do our college days, and then it was difficult, 'because we had to use the work laptops or bring in our own laptops, so it was a bit difficult with public Wi-Fi. So that was a little bit inconvenient, but then obviously COVID came along, and we started doing college from home. So, in that respect it was much better for my learning, to do it from home, the college days, using my own laptop and reliable Wi-Fi." (PTPT, ID25, Hospital)

PTPTs' assessments involved direct observation in the workplace by the college assessor (i.e., pharmacist or a pharmacy technician). Due to COVID-19, some were completed virtually, and some were done in-house by qualified assessors, and the timings of the assessments changed. PTPTs also had to submit evidence demonstrating how they have achieved the learning outcomes set out in the GPhC evidence framework (see **Section 3.1**) via an online e-portfolio system, *Ecordia*. The evidence collected was signed-off by expert witness testimonies, usually provided by the practice supervisors.

Overall, PTPTs were satisfied with the college course and found the coursework very beneficial. PTPTs perceived college tutors and assessors to be very supportive and helpful. All PTPTs reported that college tutors provided timely feedback and were responsive to emails:

> **"The support has been very good. The tutors are all very friendly and very easily accessible again through the college.** They use this system called Moodle which is almost like an intranet sort of college and they're very good at just, you know, if you have any questions or you're struggling with any piece of work you can just send them a message and ask for help and they'll get back to you within a week, usually...my NVQ assessors, who also work out at the college, they're also very good and they will quite often, once a month, just send regular messages just asking how I'm getting on and whether I need assistance. Is there anything I need explaining about if I'm not understanding anything? So, I'd say it's very good." (PTPT, ID20, Hospital)

Most PTPTs reported having to do coursework in their own time as there was little-to-no protected time to do coursework during placements. Consequently, this impacted their work-life balance as

most PTPTs we talked to had caring responsibilities. Some PTPTs who were in hospital placement reported being given a study day by their employer during the college break in summer and when the workplace was less busy and found it very helpful:

> **"When we are in the colleges we are being taught, […] so we need some time to be able to do our coursework, our assignments, the reflective.** We need some time to be able to do the assignments, the work on Ecordia and so many things. So, apart from that one day we are given to attend college online, is there a way we can have a little more time from our daily business to do some of the work?" (PTPT, ID17, Hospital)

> "I've been lucky enough to get given quite a few study days recently which has been helpful. But if everything's running smoothly and I've got placements, then yeah, there's no time in work time to do any study and it's all done outside." (PTPT, ID19, Hospital)

> "In worktime I …**have the day for college with the live lessons** and then, majority of the time in assignments I'll have…**I'll do it in my own time, in the evenings when I get back from work** and stuff like that. I prefer to do it all in the week rather than at weekends so that I do have a bit of a break. But sometimes like **throughout the summer, my workplace gave us a study day**, **which would have been effectively our college day** that we would have lessens for. So, we've had that day each week throughout the summer so that we can get on with our assignments and do evidence that we have seen collected throughout the week. **So, that's been helpful that they've given us that extra time."** (PTPT, ID21, Hospital)

4.2 Roles of educational supervisors

Educational supervisors were responsible for overseeing PTPTs' learning and progress throughout the two-year programme. This meant they were responsible for devising an educational/rotational plan which tied in with the GPhC IET standards for pharmacy technicians (see **Section 3.1**).

In the Memorandum of Understanding (see **Section 3.2**), there was a requirement for PTPT to meet their educational supervisor at least once a month to ensure holistic care, review progress and provide support for the PTPT. Generally, educational supervisors would make an effort to organise the training and learning around the PTPTs' needs. In preparing PTPTs for each placement, educational supervisors organised pre-rotation meetings with each PTPT to discuss placement expectations, including expectations for what to achieve during the rotation and issues or concerns that PTPTs had. In addition to a pre-rotation meeting, educational supervisors also had regular meetings with PTPTs to monitor their progress and advise on assignments and course work, which was usually done every two to four weeks. At the end of each placement, educational supervisors had post-rotation meetings with each PTPT to review their placement experience and identify areas for learning for the PTPT's next placement.:

> **"I will have an initial meeting, at the beginning of the rotations**, just say what I am expecting you to reach or achieve during the rotation and what observation you would get and also if you have got any issues, any research you want me to do, I will carry out for you, in that way I can

reveal what tasks you can do that we can organise a review every two weeks or every four weeks." (Educational supervisor, ID2, Hospital)

"I think **it's just having that conversation at the beginning and end of the rotations** really and if they have any concerns, it's probably the best time to raise it so we can try and iron them out before they actually start their rotation**.** But as well **I have regular one to ones with all of them anyway,** so I think it's just, again, if there's any concerns that they raise with me in there just try and help them through them. **Yes, so I always have from my side regular one to ones with them, so I think it's about every two to four weeks."** (Educational supervisor, ID8, Hospital)

In addition to regular and set time for a progress review, PTPTs reported that all educational supervisors were easily reached via telephone, email or messaging system when needed:

"We're normally in constant…either emailing all the time or messaging on WhatsApp so that I can get hold of her [educational supervisor] if I need, sort of, any emergencies. […] I normally speak to her once a week on like either a phone call or a video call. And then we have, sort of, a three-monthly review where it's like quite a longer call, […] So, we have the reviews, and she always emails me to see if I'm okay and how I'm getting on and, obviously, talk about my assignments and evidence and how far I'm along with them, and always asks me if I need any help to, obviously, contact her but yeah, so she is quite communicative with me which is quite good." (PTPT, ID21, Hospital)

One educational supervisor mentioned running a virtual bi-weekly meeting, which gathered all of their PTPTs to discuss any issues/concerns; this is an effective way to use the time where an educational supervisor has more than one PTPT:

"They have three-month professional appraisals, which are put in the diary during the induction week so they're all clear and they're all set up with their calendar… And then we have a two-weekly PTPT in action group we call it and that's where all of the PTPTs across the commission posts and the pilot and the current apprentices, we all meet. We do it virtually so we can all get together, and that's a structured meeting, which gives them an opportunity to share any issues with me." (Educational supervisor, ID1, Hospital)

Educational supervisors were responsible for monitoring PTPTs' progress over the two-year programme. This was done by reviewing the PTPTs' e-portfolio for the college course and completing the evaluation form from each placement detailing the objectives that PTPTs have achieved with feedback from the practice supervisor:

"I obviously monitored their progress on Ecordia for the college to make sure everything was progressing well. Then with the individual placements, obviously **they [practice supervisors] would feedback how the PTPT had done there and the template rotation plan that I mentioned, on that it has a midpoint rotation review**, so there it reviews the objectives that they've done so far and **allows the practice supervisor to give any feedback**." (Educational supervisor, ID9, Hospital)

"W**e have evaluation forms at the end of each placement**. So, I've been able to look at the evaluation forms from the PTPT perspective and the practice supervisor perspective as well to see what we can do." (Educational supervisor, ID1, Hospital)

Regular communication between educational and practice supervisors was seen as important for the overall achievement of PTPTs' learning outcomes, especially in identifying any additional support required for the PTPT. Yet, this occurred very rarely. Only one educational supervisor reported having regular catch-up meetings with practice supervisors to discuss a PTPT's progress. This was because it was difficult for supervisors to find time in their already busy day-to-day work. One suggestion was to set up a requirement/system for regular communication between educational and practice supervisors. Regular contact between education and practice supervisors was particularly needed when PTPTs were off-site to ensure that any problems or issues were identified and addressed early:

"I guess the other challenges as well is probably **making sure they're okay when they're off-site** because I know we're their main employer and we obviously keep in touch with them often but it's just if there are any issues, you're putting more of the responsibility on them to let us know in good time. **You're not seeing them daily just to check that they are okay or sometimes people look okay but they're not and you can usually grasp that by seeing them.** But, yeah, I think just those really, just making sure the students are okay more than anything when they're not on-site was probably the main concerns." (Educational supervisor, ID8, Hospital)

Both educational and practice supervisors acknowledged there was room for improvement in terms of communication with each other to monitor PTPTs' progress. However, time and busy working schedules often prevented this from happening:

"I'd try hard to communicate with their clinical supervisors in their host sites. But some of their **clinical supervisors were pharmacists and busy retail pharmacies and didn't have the time to talk**, didn't have the time to go to meetings." (Educational supervisor, ID3, Hospital)

"I think, to develop networks and be able to communicate better between all the placements, it would have been good, if all three placement leads could have met. But obviously, time restrictions and jobs affect that." (Educational supervisor, ID4, Hospital)

HEE regional facilitators were seen as essential to support educational supervisors in fulfilling their role, and they were seen as the go-to person for any questions, issues, or concerns. Most educational supervisors told us that at the beginning, it felt like there was limited support from HEE in terms of knowing who to ask. However, once HEE regional facilitators were in post, which was two months after the pilot started, all educational supervisors found them extremely valuable:

"In terms of support from HEE, I think initially again there was a bit of a miscommunication in terms of we weren't quite sure where we stood in terms of what support they could offer but I think there was a meeting a bit later which they talked about their roles, how we can access support from them and how we can raise concerns. But I think, in hindsight, **it would have been good to have those conversations with HEE earlier on when the PTPTs started and having that**

name to faces, so that if we had any escalation issues, we could have asked HEE earlier on." (Educational supervisor, ID6, GP practice)

"And having that regional facilitator was fantastic to have a point to go to […] she [a HEE regional facilitator] was approachable, happy to help and gave me follow-up and feedback […]. So, I think **that was an essential part of the process** of the course, really. **That was a necessity."** (Educational supervisor, ID7, Hospital)

4.3 Roles of practice supervisors

Practice supervisors were responsible for overseeing PTPTs' day-to-day work during placements, and PTPTs' progress was monitored via appraisals. Practice supervisors described supporting their PTPTs' learning and development by explaining the reasoning behind work/organisational processes, which provided meaningful learning opportunities:

"It's important to know why you're doing things, not just do them, **so what we did try is I try and explain why we were doing these things and who we would report to as an organisation as in the GPhC,** General Pharmaceutical Council, so we have our code of ethics, and they are the guidance of how we would work. And, when we're troubleshooting and dealing with issues of explaining why we chose to do this rather than another option. **So, we're trying to work with her to get her to understand why things are done, not just show her that things should be done that way, explaining, trying to educate her on the background to a lot of the systems that we operate**." (Practice supervisor, ID11, Hospital)

It was important for the programme objectives to be set and reviewed. One way of doing this was by setting 'SMART' goals:

"I had an appraisal for my first year. I'll be having an appraisal soon, coming to the end of my second year. Such as, we have like little like SMART [Specific, Measurable, Achievable, Realistic, Timely] goals. So we have to manage the SMART goals, by making…we usually set a timeframe when I want to complete them by. And then, when we hit that smart goal, we can tick it off and then set another one. So just trying to manage the workload and get my competencies done, and that's monitored through the appraisals." (PTPT, ID28, GP practice)

Practice supervisors would regularly check PTPTs' progress by going through evidence logs and having regular meetings to discuss progress and identify additional areas the PTPT wanted to cover:

"All my logs, obviously, are printed out and all my evidence… And we, sort of, **we go through them every so often to see how far, and what I've covered, what evidence I've written, and I always bring my evidence in when I've written it up for my supervisor to check**. So, obviously, my logs, obviously, show my progress as well and we'll have like catchups every, sort of, three weeks I'd say they're, where we just have a little in the office about how I've been getting on, if there's anything I would like to cover more, or if there's anything they think I need to improve on. And it's the same with the hospital they've all got copies of all my criteria about what I need too." (PTPT, ID21, Hospital)

> "So in the areas that I work with, GP and care homes, **they've got a list of all of my stuff that I need to cover for my reflective account**. And that's reviewed quite regularly and each one is ticked off when I do the reflective account and it's sent back to me and it's complete. And on my weekly meeting, we discuss what's outstanding and, if anything, that week I've studied can be put forward as a reflective account or not." (PTPT, ID23, Hospital)

In addition to formal progress monitoring, some practice supervisors reported monitoring PTPTs' progression informally by observing day-to-day tasks and providing feedback on queries. This supervisor described that most of the supervision was done informally as the PTPT was based in the same location as the supervisor:

> "Most of it [supervision] was informal because she was with us constantly, so she had constant supervision… We had a couple of formal planned meetings but mainly it was informal because she was sat right next to us." (Practice supervisor, ID12, GP practice)

Practice supervisors reported limited or a lack of interaction between practice supervisors across different sectors. The interactions that did happen were by chance rather than planned. This practice supervisor acknowledged the need to have more structured and planned meetings to understand what is covered on each rotation and get feedback on PTPTs' progress:

> "I: Did you have interactions with other practice supervisors?
>
> R: I didn't, no. No sorry, I tell a lie. No, I did because I did speak to a colleague…who was a practice supervisor for the primary care network, so for the GP practice settings. So, I did have a discussion, a brief discussion about how this PTPT got on with the rotation with them and was there any areas that they needed to work on, or for us to focus on, what was good, what was bad. So yes, I did, I did get to speak to another practice supervisor. […] I didn't speak to anyone on the mental health rotation, but **that might be a good thing going forward to have sort of almost like a practice supervisor's meeting just to get an understanding of what things will be covered on each rotation**. I guess like I did for this rotation, get some feedback from the last one to see if there's anything they need to work on." (Practice supervisor, ID10, CCG)

5 Realisation of PTPT pilot's intended benefits

The cross-sector training model is intended to create a fluid workforce that can work across different sectors and who is competent and confident to deliver the objectives detailed in the NHS Long Term Plan (see Section 3.2). This section explores the extent to which the pilot has achieved these intended benefits.

5.1 Development of a flexible pharmacy technician workforce

PTPTs told us that the pilot had given them confidence in carrying out different tasks and understanding differences in services across the different sectors. Many PTPTs mentioned needing to be organised and adaptable to different ways of doing things in different settings. They also reported becoming more autonomous/accountable because of the growing responsibilities they were given over time. They reported notable development in their capabilities as they progressed from observation at the start of placements to applying skills/knowledge under supervision towards the end of placements. PTPTs also described not only having confidence but also recognising their limitations, and both were important behaviours of being a healthcare professional:

> "I feel like I've had **enough time in each place to be able to do a lot of these activities on my own or do them more independently**. It's also, because **I've learnt so many different things in each place**, like my own initiative, like I do a lot of the things without even being asked to, …, like it's just become habit for me to do these things now. And I think a lot of my supervisors have said how far I've come and how much better I am at performing a lot of these tasks and they can tell that my confidence is boosted from it." (PTPT, ID21, Hospital)

> **"It's improved my confidence and knowledge and capacity to learn, and I feel much more comfortable talking about, obviously, medication, drugs, all the interaction, everything like that.** And I think being **across all the sectors** has helped […] I just know that I, obviously, work within…**like work towards the GPhC standards always, and just make sure I know my own limits and how far I can go as a pharmacy technician and when to refer**, so I think that's important." (PTPT, ID21, Hospital)

Similarly, most supervisors told us about their confidence in their PTPTs' knowledge and ability to provide services within their specific sector hence enabling the achievement of the PTPT's benefit of freeing up pharmacists' time:

> **"Extremely confident**, you know, within pharmacy, pharmacists must focus on what they can only do which is the extra and enhanced services, you know like EHC [emergency hormonal contraception], talking to the customers, recommending things and things like that, so **support to free up pharmacists**. … One thing that I always judge peoples' confidence on is when the phone's ringing, do they walk away or do they pick it up, because ultimately a phone call is, you

know, it's no different from really someone coming into the shop, but they say people that lack confidence tend to err away from speaking to people on the phone. But [PTPT name] is now just she's first on the phone, she deals with queries on the phone in an extremely polite and professional manner and she's basically…her confidence has improved hugely over the last year and a half. Her skills have obviously developed over that time now, but she's in a very…she's finishing in February I think, **so she's got five months or six months to go, and she is extremely confident at I would say nearly all…most of the tasks within dispensary**." (Practice supervisor, ID11, Hospital)

However, there was a different understanding of what PTPTs can do and their level of knowledge/skills at different stages of the training programme, and hence what the overall programme expectations were. This was particularly the case in non-hospital settings where there was limited to no experience of working with and/or training of pharmacy technicians such as general practice:

"I think for us [GP practice] it's basically the whole programme in the sense that **we didn't really know what we were expected to do."** (Practice supervisor, ID5, GP practice)

"The hospital, they obviously know what they're doing, because they've had students before. **Mental health, they haven't had students, […]. So, my first placement was a bit…it was more finding out and figuring out what they can do with me.** […] **The same with the GP, they didn't really know what to do."** (PTPT, ID16, GP practice)

In community pharmacy, where many have trained pharmacy technicians (or at least dispensers), some would see PTPTs as workers rather than learners:

"There was lots of confusion with what is this community pharmacy supposed to do with this student." (Educational supervisor, ID3, Hospital)

Supervisors' lack of understanding of PTPT sometimes had a negative impact on PTPTs, such as not being flexible to adapt to the PTPT's learning needs, and could put the PTPTs into challenging or uncomfortable situations:

"People don't know what the role of a pharmacy technician is, how do we support them, and they may ask you to do things that are out of the context […]. **Sometimes I think the PTPTs felt they had to have those difficult conversations when someone said, can you do this, can you do this**." (Educational supervisor, ID6, GP practice)

"We did have concerns about professionalism and accountability, I think because the PTPTs were moving so frequently, after every three months, we thought that because they didn't feel that they were part of a team, that the level of professionalism was a lot lower. I felt they were more like students rather than, as professionals, working in a working environment. I feel they had a student mentality; I don't know whether it was our PTPTs, but I think those were a lot of common themes that arose from our experience as educational supervisors and other hosts as well, is that professionalism and accountability. I think maybe if they were with one sector…I don't really know whether that would make a difference or not but especially accountability was one of them." (Educational supervisor, ID6, GP practice)

Additionally, some cross-sector PTPTs were compared with single-sector PTPTs. Some cross-sector PTPTs were seen as making less progress than single-sector PTPTs by their supervisors. Moreover, although cross-sector PTPTs gained an understanding of how different sectors work, as they spent less time in a particular sector compared to single-sector PTPTs, some PTPTs felt that they did not have the same opportunities and exposure gained from training in a single sector alone:

> "I think that was one of the feedback items that the hospital provided, that single **sector PTPTs were making a lot more progress than the technicians that were on the integrated pilot because they are rotating every four months.** That was another issue, I think perhaps maybe a stumbling block." (Educational supervisor, ID6, Hospital)

> "Because I'm on the course at hospital, there are a couple of other girls that do the same course, but not integrated […] and **sometimes I feel like my work is sort of compared to theirs, or like what I'm achieving in terms of work is sort of compared to those girls, and it's a little bit unfair, because a lot of the time, I'm away from the hospital, so the opportunities aren't the same.** So, that's the only area really, where I sort of feel like she could have been a bit more understanding and supportive with me. […] I mean, if **I'm for example, not uploading as many pieces of evidence or not quite achieving as much as she would like me to achieve, she sort of compares me to the other students, which is difficult when I'm sort of working elsewhere**...they get extra study time, they get more support, I guess, more physical support. **So, it's kind of difficult to be compared to them I suppose. The expectations are the same, even though the circumstances are quite different**." (PTPT, ID25, Hospital)

Not clearly understanding the purpose of the pilot has led some PTPTs to express concern that they would be unemployed following completion of the pilot:

> **"There aren't even any jobs like that are there. So, these guys now they can only apply to work in a GP practice if there's such a thing**, […]. Or a hospital. But we haven't developed, we haven't created those jobs, cross-sector jobs yet have we." (Educational supervisor, ID5, Hospital)

> "I tried to bring it up [to my supervisor] and I'm getting ahead of myself. Oh, you're getting ahead of yourself. […] that's up to your future employer. **But how do I even explain that to my future employer? How do I explain that in an interview?** […] now **I'll be unemployed when the two years is up."** (PTPT, ID22, Hospital)

Some educational supervisors suggested carving out the role and identity of a cross-sector pharmacy technician and creating the cross-sector job role:

> **"We [pharmacists] had to carve our own identity, the same as pharmacy technicians**." (Educational supervisor, ID6, GP practice)

> **"I think what we will build on in the future, is to carry on the good relationships and create roles that were 50/50, so working within hospital and primary care.** So, I think if you were to ask PTPTs what would be an attractive proposition for them once they leave us and all of them said they would like a 50/50 role, they liked the element of being in a hospital and primary care. So, **I think what we need to do with the next step is create these roles that give them the**

opportunity to work across sectors and build on those rather than training them to be a single sector and not lose the other opportunities that they've had in the training programme. **I think that's our next focus is to continue with the partnership work, continue creating roles that are new, that are innovative so that we can utilise the PTPTs that have gone through the integrated pilot scheme**." (Educational supervisor, ID6, GP practice)

The different understanding of the role of PTPTs described above contributed to a wide variance in the training experiences of both PTPTs and supervisors. To ensure PTPTs have similar experiences and opportunities in different placements, those taking part in this study recommended that expectations need be set and effectively managed. This included expectations of responsibility and accountability, what the funding covers, and which organisations are responsible for providing what support:

"So a pack of objective settings or areas of focus or maybe having a three way conversation between the college, HEE, and the partners, just to set the expectations in terms of what HEE are going to offer, in terms of support for the employers and the PTPTs and also what the college could provide support for, for the employers and the PTPTs. So, at least we knew where the responsibility and accountability lay for the PTPTs to seek further support." (Educational supervisor, ID6, GP practice)

"When HEE did the initial presentation and in that there were presentation slides and there was a grid that said you will get X amount of money for salary support. You'll get X amount of money for this and that is what you get but it doesn't relate to what happens in practice. It's not clear what that really covers. […] **So it wasn't that anything was not told or presented, it's just that it wasn't contextualised into practice and reality.** And I think it probably looks quite attractive for people, for example, if you see a table, it says, you'll get ten thousand pounds towards your training contribution but that really means ten thousand pounds of their salary, is there a shortfall in their salary that you're picking up?" (Educational supervisor, ID7, Hospital)

There was also a need to manage the expectations of individuals involved with the programme, such as the educational and practice supervisors in terms of their roles and responsibilities (see **Sections 4.2** and **4.3**) and PTPTs in terms of what a cross-sector pharmacy technician is at the end of the training. Guidance on training plans needs to allow flexibility in the variation of placement combinations. This is to enable a learner-centred approach or personalised learning (see **Sections 3.2 and 4.2** on how educational supervisors organised the placement structure and meetings differently for different learners and **Section 4.3** on how practice supervisors would identify additional areas the PTPT wanted to cover).

At the partnership level, educational supervisors told us that partners need to set out clearly which organisation is responsible for providing what financial and training support. This educational supervisor described the issues they encountered when the partners' responsibilities were not clearly set out at the beginning of the programme:

"We were not expecting to pay the students at all, because we knew that it would take a large amount of our training contribution to train them, but we wouldn't see very much of that salary support that was provided or the training support that was provided. […] And once they'd had

approval for two places**, they came back to me and said you'll have to contribute to the pay because this is going to cost us money. … we had to negotiate hard at that point** […]. And I think that they [other partners] felt that they were getting funding to do something that they would normally have to pay for and **didn't quite realise that they would lose somebody for six months and that they would obviously have a gap in their rotas** et cetera. So, I don't really know the reason why that wasn't known by them. […] And so, they agreed that they would send the student to us. We would receive none of the training support money. We would do it without that. Did it without receiving any money, which was, you know, we're more than happy to be part of the pilot because it's probably the way that the work's going to happen in the future. So, we were happy to contribute our time and our training from our staff to the individuals on that basis, in that this is hopefully [audio breaks up 05:32] the future to training people." (Educational supervisor, ID7, Hospital)

At the individual placement level, supervisors, especially practice supervisors who were based in non-hospital sectors, wanted to be given direction in terms of what they needed to do to support PTPTs gaining competencies in their setting. This was due to their lack of experience in training PTPTs:

"I think my biggest concern would be that w**e need some more direction as to what we actually need to do as a practice to support the student technician**." (Practice supervisor, ID5, GP practice)

"We had no framework or competencies that we were shown beforehand. […] So, I think **it would have been quite helpful in finding out what it is particularly that they want us to do.** Just you know, **experiences that they could only get in primary care. And what competencies that he or she could only get in primary care**, so we could focus on that, and make sure that their experience with us is worthwhile for them and more insightful." (Practice supervisor, ID6, GP practice)

There was an awareness of the National Competency Framework for Primary Care Pharmacy Technicians published by the Association of Pharmacy Technicians UK[c]. While this is was written for post-qualified pharmacy technicians, it could be used as a tool to guide the development of training of PTPTs in primary care; however, this was not widely used:

"When I first started, they didn't really know what my…what I can do, what my expectations were and everything. **So that was quite tricky at first, but now there's the GP framework for pharmacy technicians.** So, we've just been following that. […] from our college work on like the NVQ side of things, a lot of things fitted in with the community and with the hospital placements a lot. So, I could, you know, slot those in, but **I wasn't sure on how I could get in some of the GP work I've been doing and show that I have been there. So yeah, I have managed to, you know, hit some points now, from looking at the GP practice framework."** (PTPT, ID18, Hospital)

[c] https://www.aptuk.org/static/pdf/edebd257937bd0382bfb946e7e1facbb.pdf

Some areas have started developing training for both educational and practice supervisors in sectors that do not have previous experience of training PTPTs to ensure the consistency of training experiences:

> "Looking at the supervision as well, so as part of the [name of an area] cross-sector training programme that we've developed since the pilot, we're actually helping to **support training of educational supervisors and practice supervisors within the cross-sector placement, so then giving them the skills and the educational structure to then obviously have more PTPTs going through**." (Educational supervisor, ID9, Hospital)

5.2 Improved understanding of transfer of care issues

Overall, educational and practice supervisors perceived cross-sector placements helped PTPTs develop the knowledge and skills to work across different sectors. Most supervisors mentioned that cross-sector training produced a more "well-rounded pharmacy technician" with a better understanding of how different sectors work:

> "I think it will make **them a more well-rounded pharmacy technician, having that understanding of different sectors."** (Practice supervisor, ID12, GP practice)

> "I think it's a great idea to have this prospect of working, it just allows the technicians to **experience different sectors and how they work […]. It just gives them a broader skillset**." (Practice supervisor, ID10, CCG)

Similarly, some PTPTs told us how the pilot had helped them be a more 'confident and rounded technician' (PTPT, ID25, Hospital) and 'to think outside the box' (PTPT, ID20, Hospital) as they could understand things from different perspectives:

> "Having the experience of the different sectors helps me going forward to think outside the box, as it were, that whatever line of work I go into, being a pharmacy technician, I now have experience where I can think, well, hang on, let's look at this from the community perspective. Or let's look at this from GP perspective, or let's look at this from the hospital perspective. What impact am I going to have as a technician if I go in and make the decisions we make?" (PTPT, ID20, Hospital)

Most supervisors also told us that PTPTs' understanding of how different sectors work contributed to their broader understanding of the whole patient journey:

> "I think it gives them such a big broader understanding of the patient journey, so if you have a PTPT that was just based in acute, then I don't really think **they fully appreciate or understand the whole patient journey**, you know particularly like **looking at the CCG, the PTPTs found that incredibly interesting and eye-opening because they didn't realise all that background work that goes** on. And I think having integrated PTPTs will really, really help that, and then **improve their experience and knowledge and skillset for when they are working in the different areas and just have an appreciation of the other areas and maybe how they can kind of help to improve the patient journey**. I think often when you have pharmacy technicians working in secondary care, they don't fully think about the patient then being discharged and the issues that

come with that and how that then gets dealt with by the community pharmacies and by the GPs." (Educational supervisor, ID9, Hospital)

Similarly, PTPTs reported that the pilot had improved their understanding of transfer of care issues and hence improved the care they delivered to patients:

"Understanding how the whole system works automatically improves patient care, **because you know how everything is going to work when that patient goes home, or when that patient goes to see the GP, or when that patient comes into hospital.** So yeah, **I think it has improved the care that I deliver to patients**." (PTPT, ID25, Hospital)

This PTPT described how the pilot had also improved their understanding of different kinds of patients and their needs, helping them to think more 'holistically':

"I think it has given me a little more empathy in terms of dealing with people and in terms of understanding people, especially when I went to the mental health unit**.** … I consider it with an open mind, understanding the differences in society, so it's good for me. And when I'm dealing with mental health, I'm now very careful because I know people have underlying issues." (PTPT, ID17, Hospital)

5.3 Multidisciplinary team working

All PTPTs mentioned having sufficient opportunities to engage with a wide range of healthcare professionals during their placements, which had allowed them to gain a better understanding of other healthcare professionals' work, and thus helped them build confidence to work with other healthcare professionals:

"I think it's your skills of talking to different professionals and what to expect or not feeling intimidated by different people." (PTPT, ID16, GP practice)

"I've been in contact with lots of different healthcare professionals through all sectors... **Understanding how they work**, and in the community, there's the community nurses, understanding how they work, and the GP, about the different clinics. And the pharmacists do a hypertension clinic, so I've been going to that, seeing how to approach a clinic setting as well as, […] dealing with a diabetes nurse, see how they approach the clinic setting, and everything". (PTPT, ID18, Hospital)

Some PTPTs discussed shadowing/observing healthcare assistants, pharmacists, nurses and doctors during clinics. They felt that shadowing/observing other healthcare professionals helped build their clinical knowledge even if some of the tasks were outside their scope of practice:

"When I'm on the wards I speak to a lot of the nurses, and the doctors, and the advance nurse prescribers. […] But as they've seen me over the few months, **they sort of, see how far I've progressed and that they can ask me questions, a lot of the time rather that going just to my pharmacy supervisor. So, that's quite nice that they feel like I've got the knowledge as well**. I also, when I was at the GP practice, obviously, pharmacists work with as well, and the doctors there I also spent time with the paramedics at that GP practice and went on some home visits

with her as well, so that was interesting to see that side of things as well. …Yeah, **I feel working with the doctors and the pharmacists, I see a much more clinical side of pharmacy which has made me think about things more. And although I won't need a lot of it for my course it's been nice to, sort of, have the knowledge there because it definitely…when you're looking at things as a pharmacy technician you just notice things more, if that makes sense, that you're just a bit more of a clinical side of things that I have the knowledge of now**." (PTPT, ID21, Hospital)

PTPTs particularly valued being able to contribute to the wider healthcare team and being seen as a team member with specific knowledge and skills. Overall, PTPTs enjoyed working with other healthcare professionals within a multidisciplinary team:

"I suppose **being seen as sort of an important part of the team, a respected member of the team, someone with the knowledge and skills to be able to contribute to a multidisciplinary team."** (PTPT, ID25, Hospital)

This practice supervisor told us that PTPTs' understanding of how different sectors work, and the different ways in which pharmacy professionals work as part of a multidisciplinary team, supported PTPTs' learning about the professional responsibility they would have as a registered pharmacy technician:

"Having that understanding of … the different ways in which pharmacy professionals work as part of the multidisciplinary team. I think, yes, they will get a better understanding for the level of professional responsibility that they have as a registered pharmacy technician." (Practice supervisor, ID12, GP practice)

Although both supervisors and PTPTs highly valued multidisciplinary team working, this PTPT observed it occurred more commonly in hospitals than other sectors:

"**I've been to a few multidisciplinary meetings and it's quite interesting to see how they all interact, and they do really listen to you in a hospital. Whereas in a community no one listens to you.** A doctor would never talk to a dispenser and ask her advice. It's beneath them, we're just shop staff. And so, it's nice to be respected and to feel like you actually have some worth. And it's very nice working with other professionals. It changes the dynamic a lot. ...**But it's quite nice to be involved as a team and to discuss things and learn and share**. Whereas I think community you're head down, labels on boxes." (PTPT, ID22, Hospital)

6 Challenges in implementing the PTPT pilot

The PTPT Integrated Training Pilot facilitated rotational placements in different healthcare settings over the two-year training period. This section outlines the challenges in the implementation of the pilot.

6.1 Challenges external to the pilot

This was the first time that PTPTs and their supervisors worked and learned in many different new settings, i.e., training being delivered across different sectors rather than a single sector, with all stakeholders finding their way around the programme. This was also the first time this qualification was delivered under new GPhC initial education and training standards, so details of the programme were being developed during delivery. Participants suggested that college course units could be aligned more effectively with the release of evidence units and placements so that the application of formal learning in practice/workplace was supported. At the time of conducting this evaluation, the release of evidence collection units in the second year had caused PTPTs to struggle with evidence collection while experiencing a heavy workload. Most PTPTs felt that there was a lack of focus in their first-year placement because, at that time, they did not know what evidence to collect:

> **"At the very beginning of the course they had the induction unit on Ecordia. And then as far as I'm aware there was nothing until the second year started. And then they released all of it**. […] So, I really wish that I'd had some of the evidence…at least some of the reflective evidence to do first, while I had the time. Because now I've got all the evidence to do and they want it before the course finishes, I think… So, they've only given us about nine months to do it. Which out of two years seems a bit stingy?" (PTPT, ID22, Hospital)

To facilitate alignment between formal college learning and its application in practice/workplace, participants suggested that communication between the college and educational supervisors could be facilitated by Health Education England. This would allow educational and practice supervisors to have a better understanding of the college units in terms of the structure and objectives of each unit that they could then use to inform PTPTs' learning plans, which has been made available for subsequent cohorts.

In addition to being a new qualification, COVID-19 created additional challenges. Participants we talked to mostly described how COVID-19 had affected their placements. In hospitals, PTPTs were not able to do ward rounds. This PTPT described that this affected their training in medicine reconciliations and medicines management:

> "It's had its little ups and downs, mainly because of COVID, because we started the course in February 2020, and we obviously went into our first lockdown in the March. **We were unable to attend wards any longer, so that affected my first rotation in hospital because it meant I couldn't do the medication reconciliation side**. And kind of needs must, they were pulled from

pillar to post in different areas just because of staffing requirements and staffing needs. So, this was the first four months". (PTPT, ID23, Hospital)

"Because of COVID we couldn't do the medicines management rotation where we go to the ward […] So, all the students were taken out of the ward." (PTPT, ID17, Hospital)

Care home placements had to be postponed or deferred and placements at GP practices had to be restructured. This affected PTPTs' ability to learn about the processes and procedures taking place in these settings:

"Well, we had to…**initially we had to sort of postpone and defer rotations because of the pandemic.** We were obviously not going into the care homes so that made things very difficult. We were working remotely. **Therefore, it was a bit worrying because how would a pharmacy, a pre-reg technician, understand a care home role without being able to go out and visit the care homes. Because that's where you gain the most knowledge, is being out there and seeing what goes on and the processes and procedures in a care home setting."** (Practice supervisor, ID10, CCG)

COVID-19 lockdown affected GP placements more than other sectors, with some pushed to the second year and others changing general practice sites. One educational supervisor (Educational supervisor, ID8, Hospital) described that ideally, they would want an equal duration for each placement, i.e., four months block placement at a hospital, a community pharmacy, and a GP practice. However, due to COVID-19, they had to re-structure the placement at GP practice and did one big chunk of placement in Year 2 only rather than one placement each year.

"The challenge of COVID affected our one learner going into GP surgeries for a while. Because GP surgeries decided to close the doors and have like their pharmacy teams working from home. So, our one student didn't go to GP surgeries until their second year." (Educational supervisor, ID4, Hospital)

"I was supposed to go to a GP surgery initially and then they decided that I couldn't go because of COVID, because it was literally all lockdown, it was in the first lockdown, but they changed their…they decided they didn't want me, didn't want to take a student. So, while I was having my induction day, my assessor was on the phone trying to find someone who would take me." (PTPT, ID19, Hospital)

In addition to placement structure, some PTPTs reported that the pandemic limited the amount of informal, work-based learning and that this had impacted on their direct contact with patients and their confidence:

"Basically just […] meeting people that work for the organisation and finding out what they do in their day-to-day role, whereas normally the technicians would be going into practice and sort of making changes and switches to people's medicines based on cost and quality purposes. So**, I haven't really had any sort of practical experience with them**, it's just been more in the office, just been sort of with the team, which is a little bit limiting." (PTPT, ID25, Hospital)

> **"I'm a little concerned that I won't be quite as proficient as I'd like to be by the end of it**, … There's been so many challenges over the last two years, personal, because of my kids and childcare and lockdown and not being able to go out to work sometimes and having to stay home with the kids, or the kids being home while I tried to work, that it's just been one huge struggle to stay afloat the whole way through." (PTPT, ID22, Hospital)

6.2 Infrastructure

In the Memorandum of Understanding (see **Section 3.2**), the employing organisation was expected to have appropriate infrastructure to support the placement for example, desks, access to IT equipment and facilities appropriate for supervision arrangements. However, this expectation was not set or clearly communicated to placement organisations. Some PTPTs reported a lack of working space in some placements which was noted as affecting their learning experience. This was particularly reported as a feature in community pharmacy:

> "At the community pharmacy it's extremely crowded, but that's standard for community pharmacy. **I don't have my own place to do my work. There isn't the space to put a piece of paper down on a bench**. **And quite often I must stop what I'm doing and move because they need the space**. Because I'm supernumerary there's not anywhere for me to go. So, I'll be working on a bench and the deliveries will pile up one side of me, the home stuff will pile up the other side and I'll just get squeezed into a smaller gap until I leave." (PTPT, ID22, Hospital)

Some PTPTs and practice supervisors reported a lack of working space in general practice. This meant that supervisors were not able to observe PTPTs, which some felt hampering their development:

> **"A challenge I've had at the practices with the lack of working space** sometimes […] I would like to have the PTPT in with me in the same room [inaudible 03:41] answer supervisor's calls and stuff and its patient contact but we've not been able to do sometimes, **so a lot of the times I'm having to work remotely and that has hampered his own development. Unfortunately, there's no way around that, even today we've not had enough room so I can't work with him on the same site.** And that's the only barrier or issue I've faced." (Practice supervisor, ID13, GP practice)

A few PTPTs mentioned issues with access to a laptop for PTPTs to use while they were at the placement site, with some providing PTPTs with a laptop but not others:

> "I think that they should be supplied with like laptops and things, because obviously, not everybody has access. But yeah, I think that would help, so you're not using your own. […] Mental health has supplied me with a laptop while I'm here. But [name of a hospital] they haven't." (PTPT, ID16, GP practice)

6.3 Consistency of supervision

The programme required commitment from both educational and practice supervisors in terms of providing dedicated time to supervise and support PTPTs. PTPTs with good access to their practice supervisors reported positive placement experiences, which helped their learning. These

PTPTs also valued having access to supervision from other staff members when their practice supervisors were unavailable:

> "So, with…**in my community, the pharmacist helps my learning**. I ask, you know, any questions, and he supports my NVQ side of things, helping me gather evidence and doing observations. **And the same with the GP practice, I have a pharmacist there, who I can go to, for support and help**." (PTPT, ID18, Hospital)

> "Yeah, so she's [practice supervisor] a pharmacist who I work with in the GP, I'm with her every day that I am in the GP practice. **There's also another pharmacist that I can go to if she's not there**. […] And she is very much for pushing people, getting the best out of what we can, and she will push in the right directions to offer help and support. And that also crosses over to the care home arm for the integrated medicines optimisation service. And **I also have a technician there who mentors me there and I meet with her weekly as well**. She goes through anything that is outstanding that I need to do, if I haven't done or anything. So, **there's always somebody there so I'm never left on my own.** There have been a couple of possible days here and there due to unforeseen circumstances that the person who manages me and the section hasn't been there. But that doesn't mean that I can't approach any other member of staff in the area, they're all very helpful." (PTPT, ID23, Hospital)

Some PTPTs reported that practice supervisors did not always have the time to support them in their learning:

> "I have been on a couple of placements where I've been told they don't really want a student, but they've got to have one, so I just try and be quiet those days, do as I'm told. Yeah, that's difficult." (PTPT, ID19, Hospital)

> "My community placement moved me to a different pharmacy within their chain without telling my educational supervisor. And she wasn't very pleased about that because I think they just saw free staff to be honest. I think they view us as free labour. And they don't recognise the work involved. I don't think they really realised what was involved in taking us on. […] But she's obviously had enough to do herself and then she's told she's got this student…she was just told. So, it's been a bit difficult, and I have felt like a bit of a nuisance, because obviously it doesn't benefit them at all to train me." (PTPT, ID22, Hospital)

When supervisors were not available, this was viewed as hampering PTPTs' progress, for example, in terms of the lack of placement review and competencies not being signed off on time:

> **"I think after each placement, we're supposed to have…an end of rotation report. […] but no one has done any of those**. […] Because I've only got a few weeks left, and then I'm gone again. And they just keep saying, oh, yeah, we'll do it another time, we're too busy. So, we haven't had any meetings. When I first got here, we did have two meetings, but since then, in the past how many months, we haven't had any." (PTPT, ID16, GP practice)

"I've got quite a lot of work evidence that needs signing off by my expert witnesses, so now I need them to do that, they're sort of falling down a bit there. […] **getting signed off is the hardest bit**, that seems to be harder to get that done." (PTPT, ID19, Hospital)

"But in regard to like evidence and everything, **she [practice supervisor] hasn't signed anything off,** or done anything that we're supposed to do." (PTPT, ID16, GP practice)

7 Supervision model: T1 survey findings

This section presents findings from the survey to describe how supervision was delivered in practice within the PTPT Integrated Training Pilot.

7.1 Training and educational supervisor details

A total of 33 surveys were returned (of 35 PTPTs). The employing organisation sector for most respondents were NHS hospital trusts (n=25). Most respondents worked full time (n=31) and their educational supervisors were pharmacy technicians (n=28). Just over half of the respondents had more than one educational supervisor **(Table 2).**

Table 2: Training and educational supervisor details for respondents

Training and educational supervisor details	N (%)
Employing organisation Sector	
NHS Trust (hospital)	25 (76)
Community pharmacy	3 (9)
General practice	3 (9)
Primary Care Network	1 (3)
Others	1 (3)
Number of work hours per week	
29	2 (6)
35	3 (9)
37.5	26 (79)
40	2 (6)
Profession of educational supervisor	
Pharmacist	5 (15)
Pharmacy technician	28 (85)

7.2 Cross-sector placement details

Most respondents (n=25) had undertaken a secondary care placement. The duration of each placement commonly ranged between 12-23 and 24-35 weeks. Respondents were assigned a named practice supervisor for most of their placements (n=29). In most placements, the practice supervisor were pharmacy technicians (n=26) **(**

Table 3**).**

Table 3: Cross-sector placement details for respondents

Cross-sector Placement details*	N (%) **
Setting of placement	
Secondary care[a]	*25 (76)*
Community pharmacy	18 (55)
Other[b]	23 (70)
Duration of placement (weeks)	
< 12	5 (15)
12 – 23	13 (39)
24 – 35	14 (42)
≥ 36	5 (15)
Assigned a named practice supervisor for placement	
Yes	29 (88)
No	3 (9)
Don't know	4 (12)
Educational supervisor same as practice supervisor for placement	
Yes	16 (49)
No	29 (88)
Profession of practice supervisor in placement	
Pharmacist	21 (64)
Pharmacy technician	26 (79)

** Placement details had missing data. Setting of placement includes base placement*
*** Total response percentages exceed 100% as answer choices for placements 1, 2, 3 are combined*
a = NHS Acute Trust + Hospital + NHS community health trust + NHS community mental health

b = General practice/PCN + care homes + CCG

7.3 Supervision measures

The mean supervisory relationship questionnaire (SRQ) score was derived by calculating the average score for SRQ items (see **Section 0**). For educational and placement supervision, the mean SRQ score was 360.1 (SD 56.4) **(**

Table 4**)** and 333.4 (SD 81.8) **(Table 5)**, respectively. Scores for placement supervision ranged from 81- 434 indicating that respondents experienced negative supervision experiences as well as positive ones (possible range 62 - 434). The range for the mean SRQ score was considerably wider for placement supervision compared to educational supervision. For both educational and practice supervision measures, mean scores were highest for the “role model” subscale and lowest for “structure” subscale. Respondents' answers for each individual SRQ item are provided in **Appendix**.

Table 4: Scores on Educational Supervision measures

Educational Supervision measures	N (missing)	Mean	SD	Range
Total score	31 (2)	360.1	56.4	208 - 431
Safe base	31 (2)	5.7	1.1	2.5 - 7.0
Structure	31 (2)	5.6	1.1	2.1 - 7.0
Commitment	31 (2)	5.8	1.1	2.4 - 7.0
Reflective Education	31 (2)	5.6	1.1	2.7 - 7.0
Role Model	31 (2)	6.3	0.7	4.2 - 7.0
Formative feedback	31 (2)	5.8	1.1	2.2 - 7.0

**For positive statements: 1 (strongly disagree) – 7 (strongly agree)*
***For negative statements: 1 (strongly agree) – 7 (strongly disagree)*

****Total score (minimum 62 – 434 maximum)*

Table 5: Scores on Placement Supervision measures

Placement Supervision measures	N (missing)	Mean	SD	Range
Total score	31 (2)	333.4	81.8	81 – 434
Safe base	31 (2)	5.7	0.9	3.3 – 7.0
Structure	30 (3)	5.2	1.0	3.4 – 7.0
Commitment	29 (4)	5.6	0.9	3.3 – 6.9
Reflective Education	29 (4)	5.7	0.9	3.5 – 7.0
Role Model	29 (4)	6.3	0.6	4.4 – 7.0
Formative feedback	29 (4)	5.6	0.9	3.1 – 7.0

**For positive statements: 1 (strongly disagree) – 7 (strongly agree)*

***For negative statements: 1 (strongly agree) – 7 (strongly disagree)*

****Total score (minimum 62 – 434 maximum)*

7.4 Comments section

Fourteen PTPTs provided written comments in response to the question asking about the experience in the workplace during training which was analysed thematically.

Table 6, starting on the next page, presents and summarises these comments under themes.

Table 6: Themes derived from survey comments

Themes	Supporting quotations
Experiencing and understanding how different healthcare sectors are interlinked	*"It has been very beneficial to see how all the different areas of pharmacy interlink with each other to provide a collaborative pharmacy service. I would add that some of the placements did occasionally lack understanding of what the course fully entailed e.g., study time and training session etc meaning PTPTs could sometimes be used as an extra pair of hands which as a result has meant some training needs have not been completely met". (PTPT 6)* *"I have really enjoyed experiencing so many different sector[s] to pharmacy. It has really allowed me to understand more deeply the connection between them all. Learning one sector has helped me work more effectively in another". (PTPT 10)*
Support received by supervisors and placement site	*"I feel like I have received a great amount of support from my supervisors during my rotations and have been able to reach out when needed". (PTPT 5)* *"They are all good people who support me in different ways to ensure I finish my course successfully". (PTPT 11)* *"Workplace has been great in all areas, everyone very supportive and helpful. however massive difficulty getting witness statements. No one wants to put in that work, too specific, long winded and they don't have time". (PTPT 13)*
Need for additional study time	*"Study time not given at all placements. Communication between college tutors/Ecordia based tutors was poor as we weren't told of some changes etc". (PTPT 2)* *"Study time wasn't given at first but then after then after the second placement giving me 4 hours each week it was realised that I should have extra study time" (PTPT 3)* *"When on placements it can be difficult to get additional study time". (PTPT 9)*

Themes	Supporting quotations
Placement site lack of experience and knowledge of PTPT training	*"I have had extensive negative experiences with placements utilizing the pilot scheme for "free labour". (PTPT 7)* *"A lot of the time the team I went to had no experience and knowledge of what they should be doing with me. They did not know what evidence from Ecordia we could do with them. They did not know how ecordia works. There were times I was sent to clinics, and they were not expecting me (during the lockdown). I was told to sit there and do my own work. I think each placement should have knowledge of our course and what is expected from them. What kind of evidence can be completed with them? The supervisors should have enough knowledge to help us. They shouldn't be asking us for help and guidance". (PTPT 8)* *"In my first and second placements my answers seem to suggest disinterest from my clinical supervisors, but this is due more to circumstance during the pandemic making supervision challenging… I believe the owner did not fully understand the support I would require before signing up to be a host pharmacy and this put pressure on the staff. there were also many changes to the pharmacist manager during my placement which delayed evidence collection, particularly during self-checks and act checks logs. My placements did not run in blocks as the questionnaire suggests, but rather I was placed in necessary settings at times that suited the evidence that needed to be collected so I would sometimes leave and return a placement to accommodate this. (PTPT 14)*

8 Career intentions and preparedness to practise as a pharmacy technician: T2 survey findings

This section presents findings from a survey conducted at the end of the pilot to explore pre-registration trainee pharmacy technicians (PTPTs) career intentions and preparedness to practise as a pharmacy technician following completion of the PTPT training programme.

8.1 Participant training details and previous work experience

Seventy-nine surveys were issued to the single sector (n=44) and cross-sector PTPTs (n=35) on PTPT training programmes. Of these, 39 single sector and 31 cross-sector PTPTs responded to in the survey.

During pre-registration training, most single (n=38, 97%) and cross-sector PTPTs were employed by NHS hospital trust settings (n=22, 71%). All single sector (n=39, 100%) and most cross-sector PTPTs (n=28, 91%) worked in NHS hospital trust settings. Most single sector (n=31, 80%) and cross-sector PTPTs (n=26, 84%) had the experience of working in pharmacy before starting the training programme. Before starting the training programme, single sector, and cross-sector PTPTs' experiences of working in pharmacy were mainly from NHS trusts, community pharmacies, or a combination of primary and secondary care. The amount of time single sector and cross-sector PTPTs worked in other settings before starting the training programme varied from less than a year to more than five years **(**

Table 7).

Table 7. Training details and previous work experience for single sector PTPTs (n=39) and cross-sector PTPTs (n=31)

	Single sector N (%)	Cross-sector N (%)
Employing organisation		
NHS Trust (hospital)	38 (97)	22 (71)
Community pharmacy	0 (0)	2 (7)
General practice	0 (0)	3 (10)
Primary Care Network	0 (0)	1 (3)
NHS Community Health Trust	0 (0)	3 (10)
Mental Health NHS trust	1 (3)	0 (0)
Settings trained in during pre-registration training*		
NHS Trust (hospital)	39 (100)	28 (91)
Community pharmacy	2 (5)	19 (61)
Community Mental Health Trust	9 (23)	10 (32)
General practice	2 (5)	15 (48)
Primary Care Network	4 (10)	12 (39)
NHS Community Health Trust	6 (15)	6 (19)
Clinical commissioning group	3 (8)	5 (16)
Care home	1 (3)	5 (16)
Experience of working in pharmacy before starting the training programme		
Yes	31 (80)	26 (84)
No	8 (21)	5 (16)
Other settings worked in before starting the training programme **		
NHS trust (hospital)	10 (35)	10 (42)
Community pharmacy	11 (38)	5 (21)
Primary care + Secondary care	6 (21)	8 (33)
Other	2 (7)	1 (4)
Time spent working in other settings before starting the training programme**		
Up to 1 year	5 (19)	4 (17)
2-4 years	14 (52)	11 (48)
5+ years	8 (30)	8 (35)

** Respondents were asked to tick all that apply*

***Items had missing data: single sector PTPTs (n=10-12), cross sector PTPTs (n=7-8)*

8.2 Career intentions

Most single sector (n=23,59%) and cross-sector PTPTs (n=23,79%) did not have a preference for working in a particular setting before starting their training programme. All but one PTPT intended to register with General Pharmaceutical Council as a pharmacy technician. Following completion of their PTPT training programme, most single-sector PTPTs preferred to work in NHS hospital trusts (n=32,84%). In contrast, less than half of the cross-sector PTPTs (n=14, 47%) preferred to work in NHS hospital trusts following completing of their PTPT training programme. Preferences for the remaining cross-sector varied **Table** 8

Table 8: Career intentions for single sector PTPTs (n=39) and cross-sector PTPTs (n=31)

Career intentions*	**Single sector N (%)**	**Cross-sector N (%)**
Preference for working in a particular setting before starting programme		
Yes	16 (41)	6 (21)
No	23 (59)	23 (79)
Intention to register with General Pharmaceutical Council as a pharmacy technician		
Yes	38 (97)	30 (100)
No	1 (3)	0 (0)
Preferred setting to work once registered as a pharmacy technician		
NHS Trust (hospital)	32 (84)	14 (47)
Primary Care Network	4 (11)	4 (13)
General practice	0 (0)	4 (13)
Cross-sector	0 (0)	4 (13)
Community Mental Health Trust	2 (5)	0 (0)
Don't know	0 (0)	2 (7)
Community pharmacy	0 (0)	1 (3)
NHS Community Health Trust	0 (0)	1 (3)

**Items had missing data: single sector PTPTs (n= 1), cross sector PTPTs (n =1-2)*

8.3 Preparedness to work

Except for one cross-sector PTPT, all single and cross-sector PTPTs agreed/strongly agreed that they felt prepared to work in NHS hospital trusts. Cross-sector PTPTs felt significantly more prepared than single-sector PTPTs to work in all other sectors **(Table 9** and **Table 10).** These findings were statistically significant for cross-sector, GP, PCN and NHS Community health trusts **(Table 11).**

Table 9. Preparedness to work in different settings for single sector PTPTs (n=39)

Preparedness to work in the following settings	**Strongly agree (%)**	**Agree (%)**	**Neither agree nor disagree (%)**	**Disagree (%)**	**Strongly disagree (%)**
NHS Trust (hospital)*	**26 (68)**	**12 (32)**	0 (0)	0 (0)	0 (0)
Community pharmacy*	4 (11)	**18 (47)**	**6 (16)**	**7 (18)**	3 (8)
Cross-sector	2 (5)	**10 (26)**	**14 (36)**	**10 (26)**	3 (8)
General practice	3 (8)	9 (23)	**12 (31)**	**12 (36)**	3 (8)
Primary Care Network	2 (5)	7 (18)	**12 (31)**	**14 (36)**	4 (10)
NHS Community Health Trust	2 (5)	**15 (39)**	8 (21)	**12 (31)**	2 (5)
Community Mental Health Trust	2 (5)	8 (21)	**12 (31)**	**12 (31)**	5 (13)
Care home	0 (0)	6 (15)	**12 (31)**	**14 (36)**	7 (18)
Clinical Commissioning Group	1 (3)	6 (15)	**9 (23)**	**17 (44)**	6 (15)

**Missing data (n=1)*

Table 10. Preparedness to work in different settings for cross-sector PTPTs (n=31)

Preparedness to work in the following settings*	**Strongly agree (%)**	**Agree (%)**	**Neither agree nor disagree (%)**	**Disagree (%)**	**Strongly disagree (%)**
NHS Trust (hospital)	**17 (59)**	**11 (38)**	1 (3)	0 (0)	0 (0)
Community pharmacy	**13 (46)**	**10 (36)**	4 (14)	0 (0)	1 (4)
Cross-sector	**12 (41)**	**14 (48)**	2 (7)	1 (3)	0 (0)
General practice	**10 (37)**	**9 (33)**	6 (22)	1 (4)	1 (4)
NHS Community Health Trust	**9 (29)**	**11 (36)**	6 (21)	1 (3)	2 (7)
Primary Care Network	**7 (25)**	**11 (39)**	**7 (25)**	2 (7)	1 (4)
Community Mental Health Trust	**6 (21)**	**9 (31)**	5 (17)	5 (17)	4 (14)
Care home	3 (11)	**6 (21)**	**10 (36)**	**5 (18)**	4 (14)

Clinical Commissioning Group	2 (7)	**6 (21)**	**13 (46)**	3 (11)	4 (14)

**Missing data: all items had missing data (n= 2-4)*

Table 11. *Comparing cross-sector and single sector PTPTs' preparedness to practise in different sectors*

Preparedness to work in sector	**Respondent characteristics n**		**χ2 (p value)**
Cross-sector	Single sector PTPTs	Cross-sector PTPTs	
Prepared	12	26	23.5 (0.00)
Unprepared	13	1	
Neither	14	2	
NHS Community Health Trust	Single sector PTPTs	Cross-sector PTPTs	
Prepared	17	20	6.3 (0.04)
Unprepared	14	3	
Neither	8	6	
Community Mental Health NHS Trust	Single sector PTPTs	Cross-sector PTPTs	
Prepared	10	15	
Unprepared	17	9	NS
Neither	12	5	
General Practice	Single sector PTPTs	Cross-sector PTPTs	
Prepared	12	19	11.7 (0.03)
Unprepared	15	2	
Neither	12	6	
Primary Care Network	Single sector PTPTs	Cross-sector PTPTs	
Prepared	9	18	13.6 (0.01)
Unprepared	18	3	
Neither	12	7	
Care home	Single sector PTPTs	Cross-sector PTPTs	
Prepared	21	9	NS
Unprepared	6	9	
Neither	12	10	
Clinical Commissioning Group	Single sector PTPTs	Cross-sector PTPTs	
Prepared	7	8	
Unprepared	23	7	NS
Neither	9	13	

**NHS trust hospital and community pharmacy not included as 2 cells (33% 50%) have expected cell count less than 5.*

Agreed/strongly agreed with statements = "prepared"
Neither agree nor disagree = "neither"
Disagree/strongly disagree= "unprepared"

9 Discussion

This section summarises the findings from this evaluation and discusses these findings in relation to past evaluations of similar initiatives.

Pre-registration training Pharmacy Technician (PTPT) integrated training programme was a national pilot which ran for two years, from February 2020 to February 2022. The pilot was funded by the Pharmacy Integration Fund (PhIF), a national programme to support the development of pharmacy professionals through a partnership arrangement between Health Education England (HEE) and NHS England and NHS Improvement (NHSE/I). The pilot aimed to support future pharmacy technician workforce needs in new and expanding roles through structured training models that meet the General Pharmaceutical Council (GPhC) 2017 standards for the Initial Education and Training (IET) of pharmacy technicians.[7]

The aim of this evaluation was to understand PTPTs' experiences of the training programme and their learning, addressing the question of impact and added value through the perspectives of PTPTs and supervisors. We utilised a mixed-methods approach, using qualitative interviews, quantitative surveys, and documentary analysis.

It is important to note that COVID-19 affected the overall delivery and experience of the pilot, particularly through the lockdowns in 2020. The pandemic had a significant impact on the PTPTs' day to day work and training in all sectors, due to staff shortages caused by sickness and redeployment or changes to working practices in lockdown. Employers were unable to support or supervise the PTPTs as they had previously; training had to be limited to ensure the safety of the PTPTs. Interview participants mostly described the impact of COVID-19 on placements. PTPTs could not observe procedures and processes in practice and had less direct contact with patients. COVID-19 affected placements at general practice and care home more than other sectors, with some placements in general practice being delayed to the second year or placements having to be moved to another general practice site.

In addition to COVID-19, the integrated training programme was developed under new GPhC IET standards that combine both the competency and knowledge-based within one qualification/course.[7] Pharmacy technicians have always been trained under an apprenticeship-type model where most of the learning occurs on the job. However, previously PTPTs had to complete two separate qualifications. Being a new qualification meant that all involved were navigating their way through the programme. There were some challenges faced, such as the misalignment of the release of evidence units and placements so that the application of formal learning in practice/workplace was not always possible.

Despite the external challenges identified above, the evaluation shows that the pilot did achieve most of its intended benefits. The qualitative interviews showed that PTPTs reported having an improved understanding of how different sectors work and increased confidence in carrying out different tasks in different sectors. PTPTs also reported having an improved understanding of transfer of care issues and the whole patient journey. PTPTs described having good opportunities

to engage with a wide range of healthcare professionals and work as part of a multidisciplinary team, which they highly valued. The survey conducted at the end of the pilot, comparing cross-sector with single sector PTPTs supported these qualitative findings. While most single-sector PTPTs preferred to work in NHS hospital trusts (n=32,84%) following completion of training, fewer than half of the cross-sector PTPTs (n=14, 47%) preferred to work in NHS hospital trusts; preferences for the remaining cross-sector PTPTs varied. More importantly, cross-sector PTPTs felt significantly more prepared than single-sector PTPTs to work across different sectors.

Supervision was an important aspect of the programme. PTPTs with good access to their practice supervisors reported positive placement experiences, which helped their learning. However, some PTPTs reported that practice supervisors did not always have the time to support them, which was viewed as hampering their progress, such as the lack of placement review and competencies not being signed off on time. This finding was further supported by the survey finding, which suggests that PTPTs had negative and positive supervision experiences. Although COVID-19 compounded some of these, much variation was due to how supervision was delivered in practice (see **Section 6.3).** The supervisor's knowledge, skills, and experience were found to be the most positive aspect of supervision. The structure and frequency of supervision sessions within a placement were the least positive aspects of supervision. Other factors that were important for creating an effective learning environment included conducive workspace, resources, time, regular feedback, and the creation of learning opportunities for the PTPTs.

The inconsistency of supervision experiences could be attributed to a lack of understanding of what pharmacy technicians are and what they can do. Pharmacy technician roles and PTPTs are new in some sectors. This was further complicated by previous differences in the training depending on the sector, these being in either hospitals or community pharmacies.[11,12] There was also a lack of clarity in terms of the overall programme expectations and the roles of Health Education England, the partnerships, the employing organisation, educational supervisors, practice supervisors and the PTPTs.

Findings from this evaluation resonate with some of those reported in an evaluation of the PhIF funded pre-registration pharmacists in general practice programme[3], specifically in the development of a well-rounded pharmacy workforce that can work with multidisciplinary teams across different sectors. As in the pre-registration pharmacist in general practice evaluation, where pre-registration trainees based in hospital or community pharmacy spent some of their training on general practice placements, the importance of supervisors supporting PTPTs throughout the training and during the transition to different healthcare settings was recognised in this evaluation. Both evaluations also highlight the need to have staff from the same profession (in this evaluation, this is a pharmacy technician) as “role models” who have a good understanding of PTPTs’ capabilities in the placement. This was particularly important in some of the newer settings where there was no to little understanding of what pharmacy technicians are or can do. The employing organisation and their partners need to put in place a contingency plan for when a supervisor leaves the organisation or one of the partner sites drops out.

10 Recommendations

The PTPT Integrated Training Pilot has achieved most of its intended benefits. However, the pilot was not without challenges, including dealing with the impact of national lockdowns due to Covid-19 and delivering a new qualification under new GPhC IET standards. The recommendations in this section focus on the cross-sector pilot and are intended to help shape implementation at scale.

- In ensuring that the PTPT integrated training model can be implemented at scale, there needs to be **a clear understanding of what the programme should deliver**. The intention of the programme is to create a pharmacy technician workforce that is ready to work in different sectors rather than being employed as a 'cross-sector pharmacy technician'.

- **Expectations need to be effectively managed for organisations and individuals involved with the programme.**

    - At the national level, PTPT programme objectives need to be clearly set out to help **structure learning plans** whilst allowing for **flexibility** to accommodate for PTPTs' learning needs and variation of placement combinations that suit the needs of different sectors and partnership arrangements.

    - At the organisational level, **expectations need to be set and managed more effectively** in terms of what HEE funding covers, what support is provided by HEE, the education provider(s) and the employing organisations, and what training commitments are expected from the employing organisations and its placement partners.

    - There needs to be clarity in terms of the role of pharmacy technicians (which PTPTs are training to become), what PTPTs' level of knowledge and competence should be at various stages of the programme, and **what PTPTs are expected to achieve *upon completion* of the programme**. Specific clarity on what should be covered in each type of setting will be important. This will facilitate educational supervisors to plan the overall learning and practice supervisors to have more guidance and direction in terms of how to support PTPTs in their placement.

    - **PTPTs need to be given a clear set of objectives** in terms of what they are expected to achieve from the whole programme and in each placement/setting.

- **There needs to be clarity around roles.**

  - At the partnership level, the employing organisation and placement organisations need to clearly set their roles and responsibilities to ensure that each partner is clear about their contribution to the programme, in terms of financial contribution, supervisors' time commitment and workspace requirements with an overarching framework or guidance set by HEE. The employing organisation needs to take overall responsibility (and this needs to be clear to them) and then set these expectations and oversee/monitor them. Each partner needs to be clear about what is expected of them, and what their responsibilities are to meet these expectations. Some of these, e.g., supervision, time, feedback, supervisors' knowledge, and skills, need to be the same for the employing organisation and placement sites.

  - At the individual placement level, the role of educational supervisors is to manage, plan and oversee the two-year programme, and the role of practice supervisors is to oversee PTPTs' day-to-day work whilst on placement.

  - Educational supervisors have a responsibility to a PTPT and need to communicate regularly with the PTPT, even when they are on placement. Educational supervisors also need to ensure regular communication with practice supervisors as this is an important facilitator for the overall achievement of PTPTs' learning outcomes.

- Supervision is fundamental to a positive learning experience. **Supervision requires a significant time commitment by both educational and practice supervisors.** Dedicated time for educational and practice supervisors to meet and discuss the PTPTs is essential. Educational and practice supervisors need to agree on personalised learning plans that recognise learning opportunities may occur opportunistically. Co-ordination of formative assessment, sign-off of evidence collection, and picking up any issues/concerns early also requires joint working between the educational and practice supervisors. This is pertinent for when PTPTs are based on placements and away from the educational supervisor. There should be better coordination between educational and practice supervisors and between practice supervisors across all placements.

- There is a need for **infrastructure** to support PTPTs, specifically around the need for space and time for work-based application and learning in ALL settings, and for this to be communicated by the employing organisation.

- **Supervisors need to have the skills required to support PTPTs.** There is an existing supervisor training programme provided by HEE and this is important for achieving consistency in PTPTs' experience and learning.

- It may be valuable to implement **HEE supported networking to share learning from the pilot** and indeed during future programmes. Learning in terms of:

  - Documents that have been produced by organisations involved in the pilot such as handbook, learning plan and template Memorandum of Understanding for partnership.

- What has gone well or not so well in different sectors.
- Learning from organisations with knowledge of pharmacy technician role and how that can be applied and/or adapted in other sectors.
- Sharing best practice in managing the programme, and in operationalising effective supervision.

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12 Appendix

Note: In the survey, clinical/placement supervisor refers to practice supervisor. This was decided on with the regional facilitators because the terminology for supervision varies and is understood differently amongst PTPTs on the PTPT programme.

12.1 Placement 1

12.1.1 Educational supervision (safe subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My educational supervisor is respectful of my views and ideas	**13 (41.9)**	**15 (48.4)**	1 (3.2)	1 (3.2)	1 (3.2)	0 (0)	0 (0)
My educational supervisor and I are equal partners in supervision	**8 (25.8)**	**7 (22.6)**	**6 (19.4)**	9 (29.0)	0 (0)	0 (0)	1 (3.2)
My educational supervisor have a collaborative approach in supervision	**9 (29.0)**	**13 (41.9)**	**2 (6.5)**	6 (19.4)	0 (0)	1 (3.2)	0 (0)
I feel safe in my supervision meetings	**17 (54.8)**	**12 (38.7)**	**2 (6.5)**	0 (0)	0 (0)	0 (0)	0 (0)
My educational supervisor is non-judgemental in supervision	**14 (45.2)**	**10 (32.3)**	**3 (9.7)**	0 (0)	3 (9.7)	1 (3.2)	0 (0)
My educational supervisor treats me with respect	**16 (51.6)**	**10 (32.3)**	**3 (9.7)**	1 (3.2)	1 (3.2)	0 (0)	0 (0)
My educational supervisor is open-minded in supervision	**14 (45.2)**	**10 (32.3)**	**3 (9.7)**	2 (6.5)	0(0)	1 (3.2)	1(3.2)
Feedback on my performance from my educational supervisor feels like criticism	4 (12.9)	3 (9.7)	1 (3.2)	1 (3.2)	**4 (12.9)**	**10 (32.3)**	**8 (25.8)**
The advice I receive from my educational supervisor is prescriptive rather than collaborative	3 (9.7)	**5 (15.2)**	**1 (3.2)**	**10 (32.3)**	**4 (12.9)**	**6 (19.4)**	2 (6.4)
I feel able to discuss my concerns with my educational supervisor openly	**13 (41.9)**	**8 (25.8)**	**5 (16.1)**	0 (0)	2 (6.5)	2 (6.5)	1 (3.2)
Supervision feels like an exchange of ideas	**11 (35.5)**	**10 (32.3)**	**4 (12.9)**	3 (9.7)	1 (3.2)	1 (3.2)	1 (3.2)
My educational supervisor gives feedback in a way that feels safe	**11 (35.5)**	**14 (45.2)**	3 (9.7)	3 (9.7)	0 (0)	0 (0)	0 (0)
My educational supervisor treats me like an adult	14 (45.2)	11 (35.5)	3 (9.7)	1 (3.2)	2 (6.5)	0 (0)	0 (0)
I am able to be open with my educational supervisor	**12 (38.7)**	**10 (32.3)**	**5 (16.1)**	2 (6.5)	0(0)	1 (3.2)	1 (3.2)

I feel if I discuss my feelings openly with my educational supervisor, I would be negatively evaluated	3 (9.1)	5 (16.1)	1 (3.2)	**4 (12.9)**	2 (6.5)	**7 (22.6)**	**9 (29.0)**

**Items had missing data. Percentages are based on the number of item responses.*

12.1.2 Educational supervision (structure subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My educational supervision meetings take place regularly	**7 (22.6)**	**12 (38.7)**	**3 (9.7)**	0 (0)	5 (16.1)	2 (6.5)	2 (6.5)
Educational supervision meetings are structured	**9 (29.0)**	**13 (41.9)**	2 (6.5)	1 (3.2)	3 (9.7)	2 (6.5)	1 (3.2)
My educational supervisor makes sure that our supervision meetings are kept free from interruptions	**12 (38.7)**	**12 (38.7)**	3 (9.7)	2 (6.5)	0 (0)	0 (0)	2 (6.5)
Supervision meetings are regularly cut short by my educational supervisor	0 (0)	0 (0)	0 (0)	2 (6.5)	2 (6.5)	**17 (54.8)**	**10 (32.2)**
Educational supervision meetings are focused	**10 (32.3)**	**15 (48.4)**	3 (9.7)	0 (0)	2 (6.5)	0 (0)	1 (3.2)
My educational supervision meetings are disorganised	1 (3.2)	1 (3.2)	1 (3.2)	1 (3.2)	3 (9.7)	**14 (45.2)**	**10 (32.3)**
My educational supervision meetings are arranged in advance	**9 (29.0)**	**14 (45.2)**	1 (3.2)	**5 (16.1)**	1 (3.2)	0 (0)	1 (3.2)

My educational supervisor and I both draw up an agenda for supervision together	**5 (16.1)**	**14 (45.2)**	1 (3.2)	**6 (19.4)**	1 (3.2)	2 (6.5)	2 (6.5)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.3 Educational supervision (commitment subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My educational supervisor is enthusiastic about supervising me	**10 (32.3)**	**15 (48.4)**	2 (6.5)	2 (6.5)	0 (0)	1 (3.2)	1 (3.2)
My educational supervisor appears interested in supervising me	**11 (35.3)**	**15 (48.4)**	**4 (12.9)**	0 (0)	0 (0)	0 (0)	1 (3.2)
My educational supervisor appears uninterested in me	1 (3.2)	1 (3.2)	1 (3.2)	2 (6.5)	1 (3.2)	**13 (41.9)**	**12 (38.7)**
My educational supervisor appears interested in me as a person	**7 (22.6)**	**15 (48.4)**	1 (3.2)	**5 (16.1)**	1 (3.2)	1 (3.2)	1 (3.2)
My educational supervisor appears to like supervising	**12 (38.7)**	**14 (45.2)**	2 (6.5)	3 (9.7)	0 (0)	0 (0)	0 (0)
I feel like a burden to my educational supervisor	1 (3.2)	2 (6.5)	3 (9.7)	4 (12.9)	3 (9.7)	**9 (29.0)**	**9 (29.0)**
My educational supervisor is approachable	**13 (41.9)**	**11 (35.5)**	**4 (12.9)**	1 (3.2)	1 (3.2)	1 (3.2)	1 (3.2)
My educational supervisor is available to me	**13 (41.9)**	**11 (35.5)**	**5 (16.1)**	1 (3.2)	0 (0)	1 (3.2)	0 (0)
My educational supervisor pays attention to my	**11 (35.5)**	**12 (38.7)**	1 (3.2)	4 (12.9)	1 (3.2)	1 (3.2)	1 (3.2)

spoken feelings and anxieties							
My educational supervisor appears interested in my development as a professional	**14 (42.4)**	**11 (35.5)**	4 (12.9)	1 (3.2)	0 (0)	0 (0)	1 (3.2)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.4 Educational supervision (reflective education subscale)

Statement*	**Strongly agree (%)**	**Agree (%)**	**Slightly agree (%)**	**Neither agree nor disagree (%)**	**Slightly disagree (%)**	**Disagree (%)**	**Strongly disagree (%)**
My educational supervisor encourages me to reflect on my practice	**14 (45.2)**	**12 (38.7)**	4 (12.9)	0 (0)	0 (0)	1 (3.2)	0 (0)
My educational supervisor links theory and practice well	**9 (29.0)**	**17 (54.8)**	3 (9.7)	0 (0)	2 (6.5)	0 (0)	0 (0)
My educational supervisor pays close attention to the process of supervision	**9 (29.0)**	**13 (41.9)**	3 (9.7)	4 (12.9)	2 (6.5)	0 (0)	0 (0)
My educational supervisor acknowledges the power differential between supervisor and supervisee	**8 (25.8)**	**6 (19.4)**	**6 (19.4)**	**9 (29.0)**	2 (6.5)	0 (0)	0 (0)
My educational supervisor pays attention to my unspoken feelings and anxieties	**6 (19.4)**	**13 (41.9)**	**3 (9.7)**	**4 (12.9)**	2 (6.5)	1 (3.2)	2 (6.5)
My educational supervisor facilitates interesting and informative discussions in supervision	**9 (29.0)**	**11 (35.5)**	**4 (12.9)**	**5 (16.1)**	1 (3.2)	1 (3.2)	0 (0)
I learn a great deal from observing my educational supervisor	**10 (32.3)**	**8 (25.8)**	3 (9.7)	**6 (19.4)**	0 (0)	2 (6.5)	2 (6.5)

**Items had missing data. Percentages are based on the number of item responses.*

Educational supervision (role model subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My educational supervisor is knowledgeable	**17 (51.5)**	**13 (39.4)**	0 (0)	0 (0)	1 (3.2)	0 (0)	0 (0)
My educational supervisor is an experienced pharmacy professional	**19 (61.3)**	**10 (32.3)**	1 (3.2)	1 (3.2)	0 (0)	0 (0)	0 (0)
I respect my educational supervisor's skills	**19 (61.3)**	**8 (25.8)**	**3 (9.7)**	1 (3.2)	0 (0)	0 (0)	0 (0)
My educational supervisor is knowledgeable about the organisational system in which they work	**17 (54.8)**	**11 (35.5)**	2 (6.5)	1 (3.2)	0 (0)	0 (0)	0 (0)
Colleagues appear to respect my educational supervisor's views	**17 (54.8)**	**7 (22.6)**	**5 (16.1)**	0 (0)	0 (0)	2 (6.5)	0 (0)
My educational supervisor gives me practical support	**13 (41.9)**	**13 (41.9)**	1 (3.2)	2 (6.5)	1 (3.2)	0 (0)	1 (3.2)
I respect my educational supervisor as a pharmacy professional	**15 (48.4)**	**13 (41.9)**	1 (3.2)	1 (3.2)	1 (3.2)	0 (0)	0 (0)
My educational supervisor is respectful of patients	**20 (64.5)**	**11 (35.5)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
I respect my educational supervisor as a person	**19 (61.3)**	**11 (35.5)**	0 (0)	0 (0)	1 (3.2)	0 (0)	0 (0)
My educational supervisor appears uninterested in his / her patients	**4 (12.9)**	3 (9.7)	0 (0)	0 (0)	1 (3.2)	**5 (16.1)**	**18 (58.1)**
My educational supervisor treats his / her colleagues with respect	**17 (54.8)**	**11 (35.5)**	1 (3.2)	2 (6.5)	0 (0)	0 (0)	0 (0)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.5 Educational supervision (formative feedback subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My educational supervisor gives me helpful negative feedback on my performance	**6 (19.4)**	**14 (45.2)**	**5 (16.1)**	1 (3.2)	2 (6.5)	3 (9.7)	0 (0)
My educational supervisor can balance negative feedback on my performance with praise	**7 (22.6)**	**18 (58.1)**	1 (3.2)	1 (3.2)	0 (0)	4 (12.9)	0 (0)
My educational supervisor gives me positive feedback on my performance	**13 (41.9)**	**13 (41.9)**	1 (3.2)	1 (3.2)	2 (6.1)	1 (3.2)	0 (0)
My educational supervisor's feedback on my performance is constructive	**10 (32.3)**	**16 (51.6)**	1 (3.2)	1 (3.2)	1 (3.2)	1 (3.2)	0 (0)
My educational supervisor pays attention to my level of competence	**13 (41.9)**	**13 (41.9)**	2 (6.5)	1 (3.2)	1 (3.2)	1 (3.2)	0 (0)
My educational supervisor helps me identify my own learning needs	**11 (35.5)**	**15 (48.4)**	2 (6.5)	1 (3.2)	0 (0)	2 (6.5)	0 (0)
My educational supervisor does not consider the impact of my previous skills and experience on my learning needs	2 (6.5)	2 (6.5)	2 (6.5)	**7 (22.6)**	1 (3.2)	**10 (32.3)**	**7 (22.6)**
My educational supervisor thinks about my training needs	**15 (48.4)**	**11 (35.5)**	2 (6.5)	1 (3.2)	0 (0)	2 (6.5)	0 (0)
My educational supervisor gives me regular feedback on my performance	**10 (32.3)**	**13 (41.9)**	**5 (16.1)**	2 (6.5)	0 (0)	1 (3.2)	0 (0)
As my skills and confidence grow, my educational supervisor adapts supervision to take this into account	**10 (32.3)**	**13 (41.9)**	**4 (12.9)**	2 (6.5)	0 (0)	1 (3.2)	1 (3.2)
My educational supervisor tailors supervision to my level of competence	**9 (29.0)**	**13 (41.9)**	**5 (16.1)**	2 (6.5)	0 (0)	1 (3.2)	1 (3.2)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.6 Placement 1 (safe subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My clinical/placement supervisor in placement 1 is respectful of my views and ideas	**11 (35.5)**	**11 (35.5)**	3 (9.7)	3 (9.7)	1 (3.2)	1 (3.2)	1 (3.2)
My clinical/placement supervisor in placement 1 and I are equal partners in supervision	**8 (25.8)**	**9 (29.0)**	3 (9.7)	**7 (22.6)**	0 (0)	**4 (12.9)**	0 (0)
My clinical/placement supervisor in placement 1 have a collaborative approach in supervision	**9 (29.0)**	**12 (38.7)**	4 (12.9)	3 (9.7)	0 (0)	2 (6.5)	1(3.2)
I feel safe in my supervision meetings in placement 1	**12 (38.7)**	**13 (41.9)**	0 (0)	4 (12.9)	1 (3.2)	0 (0)	1 (3.2)
My clinical/placement supervisor in placement 1 is non-judgemental in supervision	**12 (38.7)**	**15 (48.4)**	0 (0)	1 (3.2)	1 (3.2)	0 (0)	2 (6.5)
My c**linical**/placement supervisor in placement 1 treats me with respect	**13 (41.9)**	**12 (38.7)**	2 (6.5)	2 (6.5)	1 (3.2)	0 (0)	1 (3.2)
My clinical/placement supervisor in placement 1 is open-minded in supervision	**11 (35.5)**	**11 (33.5)**	2 (6.5)	4 (12.9)	1 (3.2)	1 (3.2)	1 (3.2)
Feedback on my performance from my clinical/placement supervisor in placement 1 feels like criticism	3 (9.7)	3 (9.7)	1 (3.2)	3 (9.7)	2 (6.5)	**12 (38.7)**	**7 (22.6)**
The advice I receive from my clinical/placement supervisor in placement 1 is prescriptive rather than collaborative	**4 (12.9)**	**5 (16.1)**	1 (3.2)	**10 (32.3)**	2 (6.5)	**5 (16.1)**	**4 (12.9)**
I feel able to discuss my concerns with my clinical/placement supervisor in placement 1 openly	**10 (32.3)**	**9 (29.0)**	**5 (16.1)**	2 (6.5)	1 (3.2)	3 (9.7)	1 (3.2)

Supervision in placement 1 feels like an exchange of ideas	**7 (22.6)**	**9 (29.0)**	**6 (19.4)**	**5 (16.1)**	0 (0)	3 (9.7)	1 (3.2)
My clinical/placement supervisor in placement 1 gives feedback in a way that feels safe	**11 (35.5)**	**12 (38.7)**	1 (3.2)	6 (19.4)	0 (0)	0 (0)	1 (3.2)
My clinical/placement supervisor in placement 1 treats me like an adult	**14 (45.2)**	**10 (32.3)**	1 (3.2)	4 (12.9)	0 (0)	1 (3.2)	1 (3.2)
I can be open with my clinical/placement supervisor in placement 1	**10 (32.3)**	**11 (35.5)**	3 (9.7)	4 (12.9)	1 (3.2)	1 (3.2)	1 (3.2)
I feel if I discuss my feelings openly with my clinical/placement supervisor in placement 1 , I would be negatively evaluated	4 (12.9)	2 (6.5)	2 (6.5)	3 (9.7)	1 (3.2)	**10 (32.3)**	**9 (29.0)**

**Items had missing data. Percentages are based on the number of item responses.*

12.1.7 Placement 1 (structure subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My clinical/placement supervisor in placement 1 meetings take place regularly	**6 (20.0)**	**10 (33.3)**	2 (6.7)	**5 (16.7)**	1 (3.3)	2 (6.7)	**4 (13.3)**
My practice/clinical supervision meetings in placement 1 are structured	**6 (20.0)**	**10 (33.3)**	**3 (10.0)**	6 (20.0)	0 (0)	2 (6.7)	3 (10.0)
My clinical/placement supervisor in placement 1 makes sure that our supervision meetings are kept free from interruptions	**6 (20.0)**	**10 (33.3)**	2 (6.7)	**6 (20.0)**	1 (3.3)	4 (13.3)	1 (3.3)
Supervision meetings in placement 1 are regularly cut short by my practice/clinical supervisor	2 (6.7)	2 (6.7)	2 (6.7)	**8 (26.7)**	1 (3.3)	**9 (30.0)**	**6 (20.0)**
Practice/clinical supervision meetings in placement 1 are focused	**5 (16.7)**	**10 (33.3)**	2 (6.7)	**9 (30.0)**	1 (3.3)	2 (6.7)	1 (3.3)

My practice/clinical supervision meetings in Placement 1 are disorganised	2 (6.7)	2 (6.7)	**4 (13.3)**	**9 (30.0)**	1 (3.3)	**7 (23.3)**	**5 (16.7)**
My practice/clinical supervision meetings in Placement 1 are arranged in advance	**6 (20.0)**	**7 (23.3)**	**6 (23.3)**	**6 (20.0)**	0 (0)	3 (10.0)	2 (6.7)
My practice/clinical supervisor in placement 1 and I both draw up an agenda for supervision together	**4 (13.3)**	**10 (33.3)**	**3 (10.0)**	**7 (23.3)**	0 (0)	4 (13.3)	2 (6.7)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.8 Placement 1 (commitment subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My p**ractice**/clinical supervisor in placement 1 is enthusiastic about supervising me	**8 (27.6)**	**11 (37.9)**	3 (10.3)	3 (10.3)	2 (6.9)	0 (0)	2 (6.9)
My practice/clinical supervisor in placement 1 appears interested in supervising me	**8 (27.6)**	**10 (34.5)**	4 (13.8)	3 (10.3)	2 (6.1)	0 (0)	2 (6.9)
My practice/clinical supervisor in placement 1 appears uninterested in me	1 (3.4)	4 (13.8)	2 (6.9)	**6 (20.7)**	0(0)	**8 (27.6)**	**8 (27.6)**
My practice/clinical supervisor in placement 1 appears interested in me as a person	**5 (17.2)**	**13 (44.8)**	2 (6.9)	**6 (20.7)**	1 (3.4)	1 (3.4)	1 (3.4)
My practice/clinical supervisor in placement 1 appears to like supervising	**7 (24.1)**	**11 (37.9)**	3 (10.3)	**6 (20.7)**	0 (0)	0 (0)	2 (6.9)
I feel like a burden to my p**ractice**/clinical supervisor in placement 1	2 (6.9)	4 (13.8)	4 (13.8)	2 (6.9)	3 (10.3)	**8 (27.6)**	**6 (20.7)**
My practice/clinical supervisor in placement 1 is approachable	**8 (27.6)**	**12 (41.4)**	5 (17.2)	2 (6.9)	0 (0)	1 (3.4)	1 (3.4)

My practice/clinical supervisor in placement 1 is available to me	**7 (24.1)**	**11 (37.9)**	**6 (20.7)**	1 (3.4)	0 (0)	0(0)	4 (13.8)
My practice/clinical supervisor in placement 1 pays attention to my spoken feelings and anxieties	**5 (17.2)**	**13 (44.8)**	**5 (17.2)**	**5 (17.2)**	0 (0)	0 (0)	1 (3.4)
My practice/clinical supervisor in placement 1 appears interested in my development as a professional	**7 (24.1)**	**13 (44.8)**	3 (10.3)	3 (10.3)	1 (3.4)	0 (0)	2 (6.9)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.9 Placement 1 (reflective education subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My practice/clinical supervisor in placement 1 encourages me to reflect on my practice	**6 (20.7)**	**13 (44.8)**	5 (17.2)	4 (13.8)	0 (0)	0 (0)	1 (3.4)
My practice/clinical supervisor in placement 1 links theory and practice well	**6 (18.2)**	**14 (48.3)**	3 (10.3)	**5 (17.2)**	0 (0)	0 (0)	1 (3.4)
My practice/clinical supervisor in placement 1 pays close attention to the process of supervision	**5 (17.2)**	**12 (41.4)**	**5 (17.2)**	**4 (13.8)**	1 (3.4)	0 (0)	2 (6.9)
My practice/clinical supervisor in placement 1 acknowledges the power differential between supervisor and supervisee	**6 (20.7)**	**9 (31.0)**	3 (10.3)	**9 (31.0)**	0 (0)	1 (3.4)	1 (3.4)
My practice/clinical supervisor in placement 1 pays attention to my unspoken feelings and anxieties	**5 (17.2)**	**10 (34.5)**	**5 (17.2)**	**6 (20.7)**	1 (3.4)	1 (3.4)	1 (3.4)
My practice/clinical supervisor in placement 1 facilitates interesting and	**6 (20.7)**	**10 (34.5)**	**7 (24.1)**	**5 (17.2)**	0 (0)	0 (0)	1 (3.4)

informative discussions in supervision							
I learn a great deal from observing my practice/clinical supervisor in placement 1	**9 (31.0)**	**11 (37.9)**	2 (6.9)	4 (13.8)	0 (0)	2 (6.9)	1 (3.4)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.10 Placement 1 (role model subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My practice/clinical supervisor in placement 1 is knowledgeable	**17 (58.6)**	**9 (31.0)**	0 (0)	2 (6.1)	0 (0)	0 (0)	1 (3.4)
My practice/clinical supervisor in placement 1 is an experienced pharmacy professional	**17 (58.6)**	**9 (31.0)**	1 (3.4)	1 (3.4)	0 (0)	0 (0)	1 (3.4)
I respect my placement 1 practice/clinical supervisor's skills	**17 (58.6)**	**9 (31.0)**	0 (0)	2 (6.9)	0 (0)	0 (0)	1 (3.4)
My practice/clinical supervisor in placement 1 is knowledgeable about the organisational system in which they work	**17 (58.6)**	**9 (31.0)**	1 (3.4)	1 (3.4)	0 (0)	0 (0)	1 (3.4)
Colleagues appear to respect my Placement 1 practice/clinical supervisor's views	**16 (55.2)**	**11 (37.9)**	1 (3.4)	0 (0)	0 (0)	0 (0)	1 (3.4)
My practice/clinical supervisor in placement 1 gives me practical support	**11 (37.9)**	**9 (31.0)**	2 (6.9)	0 (0)	1 (3.4)	2 (6.9)	2 (6.9)
I respect my p**ractice**/clinical supervisor in placement 1 as a pharmacy professional	**15 (51.7)**	**10 (34.5)**	2 (6.9)	1 (3.4)	0 (0)	0 (0)	1 (3.4)
My practice/clinical supervisor in placement 1 is respectful of patients	**15 (51.7)**	**11 (37.9)**	1 (3.4)	0 (0)	0 (0)	0 (0)	1 (3.4)
I respect my practice/clinical supervisor in placement 1 as a person	**15 (51.7)**	**10 (34.5)**	1 (3.4)	1 (3.4)	1 (3.4)	0 (0)	1 (3.4)

My practice/clinical supervisor in placement 1 appears uninterested in his / her patients	2 (6.9)	3 (10.3)	0 (0)	2 (6.9)	1 (3.4)	**8 (27.6)**	**13 (44.8)**
My practice/clinical supervisor in placement 1 treats his / her colleagues with respect	**14 (48.3)**	**9 (31.0)**	2 (6.9)	2 (6.9)	0 (0)	0 (0)	2 (6.9)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.11 Placement 1 (formative feedback subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My practice/clinical supervisor in placement 1 gives me helpful negative feedback on my performance	2 (6.9)	**13 (44.8)**	**6 (20.7)**	3 (10.3)	0 (0)	3 (10.3)	2 (6.9)
My practice/clinical supervisor in placement 1 can balance negative feedback on my performance with praise	**6 (21.4)**	**13 (46.4)**	2 (7.1)	**6 (21.4)**	0 (0)	0 (0)	1 (3.6)
My practice/clinical supervisor in placement 1 gives me positive feedback on my performance	**8 (28.6)**	**12 (42.9)**	4 (14.3)	2 (7.1)	0 (0)	1 (3.6)	1 (3.6)
My placement 1 practice/clinical supervisor's feedback on my performance is constructive	**6 (21.4)**	**13 (46.4)**	4 (14.3)	3 (10.7)	1 (3.6)	0 (0)	1 (3.6)
My practice/clinical supervisor in placement 1 pays attention to my level of competence	**7 (25.0)**	**11 (39.3)**	4 (14.3)	4 (14.3)	0 (0)	0 (0)	2 (7.1)
My practice/clinical supervisor in placement 1 helps me identify my own learning needs	**7 (25.0)**	**11 (39.3)**	4 (14.3)	2 (7.1)	2 (7.1)	1 (3.6)	1 (3.6)
My practice/clinical supervisor in placement 1 does not consider the impact of my previous skills and experience on my learning needs	1 (3.6)	4 (14.3)	1 (3.6)	**7 (25.0)**	4 (14.3)	**7 (25.0)**	4 (14.3)
My practice/clinical supervisor in placement 1 thinks about my training needs	**7 (25.0)**	**12 (42.9)**	2 (7.1)	3 (10.7)	0 (0)	3 (10.7)	1 (3.6)

My practice/clinical supervisor in placement 1 gives me regular feedback on my performance	**7 (25.0)**	**11 (39.3)**	3 (10.7)	2 (7.1)	0 (0)	3 (10.7)	2 (7.1)
As my skills and confidence grow, my practice/clinical supervisor in placement 1 adapts supervision to take this into account	**6 (21.4)**	**14 (50.0)**	4 (14.3)	2 (7.1)	0 (0)	1 (3.6)	1 (3.6)
My practice/clinical supervisor in placement 1 tailors supervision to my level of competence	**6 (21.4)**	**13 (46.4)**	2 (7.1)	3 (10.7)	1 (3.6)	2 (7.1)	1 (3.6)

**Items had missing data. Percentages are based on the number of item responses.*

Placement 2

12.1.12 Placement 2 (safe subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My clinical/placement supervisor in placement 2 is respectful of my views and ideas	**10 (38.5)**	**11 (42.3)**	**3 (11.5)**	1 (3.8)	1 (3.8)	0 (0)	0 (0)
My clinical/placement supervisor in placement 2 and I are equal partners in supervision	**9 (34.6)**	**8 (30.8)**	2 (7.7)	2 (7.7)	2 (7.7)	3 (11.5)	0 (0)
My clinical/placement supervisor in placement 2 have a collaborative approach in supervision	**10 (38.5)**	**9 (34.6)**	3 (11.5)	2 (7.7)	0 (0)	2 (7.7)	0 (0)
I feel safe in my supervision meetings in placement 2	**11 (42.3)**	**12 (46.2)**	1 (3.8)	2 (7.7)	0 (0)	0 (0)	0 (0)
My clinical/placement supervisor in placement 2 is non-judgemental in supervision	**10 (38.5)**	**12 (46.2)**	1 (3.8)	1 (3.8)	2 (7.7)	0 (0)	0 (0)
My c**linical**/placement supervisor in placement 2 treats me with respect	**11 (42.3)**	**13 (50.0)**	0 (0)	1 (3.8)	0 (0)	1 (3.8)	0 (0)
My clinical/placement supervisor in placement 2 is open-minded in supervision	**11 (42.3)**	**10 (38.5)**	4 (15.4)	0 (0)	0 (0)	1 (3.8)	0 (0)

Feedback on my performance from my clinical/placement supervisor in placement 2 feels like criticism	0 (0)	3 (11.5)	1 (3.8)	1 (3.8)	1 (3.8)	**12 (46.2)**	**8 (30.8)**
The advice I receive from my clinical/placement supervisor in placement 2 is prescriptive rather than collaborative	0 (0)	3 (11.5)	0 (0)	**11 (42.3)**	0 (0)	**10 (38.5)**	2 (7.7)
I feel able to discuss my concerns with my clinical/placement supervisor in placement 2 openly	**8 (30.8)**	**12 (46.2)**	3 (11.5)	1 (3.8)	0 (0)	2 (7.7)	0 (0)
Supervision in placement 2 feels like an exchange of ideas	**8 (30.8)**	**10 (38.5)**	2 (7.7)	3 (11.5)	1 (3.8)	2 (7.7)	0 (0)
My clinical/placement supervisor in placement 2 gives feedback in a way that feels safe	**10 (38.5)**	**12 (46.2)**	3 (11.5)	1 (3.8)	0 (0)	0 (0)	0 (0)
My clinical/placement supervisor in placement 2 treats me like an adult	**11 (42.3)**	**12 (46.2)**	0 (0)	2 (7.7)	0 (0)	1 (3.8)	0 (0)
I am able to be open with my clinical/placement supervisor in placement 2	**10 (38.5)**	**9 (34.6)**	4 (15.4)	2 (7.7)	0 (0)	(0)	1 (3.8)
I feel if I discuss my feelings openly with my clinical/placement supervisor in placement 2 , I would be negatively evaluated	**5 (19.2)**	3 (11.5)	1 (3.8)	2 (7.7)	2 (7.7)	**8 (30.8)**	**5 (19.2)**

**Items had missing data. Percentages are based on the number of item responses.*

12.1.13 Placement 2 (structure subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My clinical/placement supervisor in placement 2 meetings take place regularly	**7 (26.9)**	**9 (34.6)**	4 (34.6)	1 (3.8)	1 (3.8)	3 (11.5)	1 (3.8)
My practice/clinical supervision meetings in	**6 (23.1)**	**10 (38.5)**	**4 (15.4)**	3 (11.5)	1 (3.8)	1 (3.8)	1 (3.8)

placement 2 are structured							
My clinical/placement supervisor in placement 2 makes sure that our supervision meetings are kept free from interruptions	**7 (26.9)**	**14 (53.8)**	0 (0)	2 (7.7)	1 (3.8)	1 (3.8)	1 (3.8)
Supervision meetings in placement 2 are regularly cut short by my practice/clinical supervisor	0 (0)	0 (0)	0 (0)	4 (15.4)	2 (7.7)	**9 (34.6)**	**11 (42.3)**
Practice/clinical supervision meetings in placement 2 are focused	**7 (26.9)**	**12 (46.2)**	2 (7.7)	3 (11.5)	0 (0)	1 (3.8)	1 (3.8)
My practice/clinical supervision meetings in Placement 2 are disorganised	0 (0)	3 (9.1)	1 (3.8)	4 (15.4)	2 (6.1)	**7 (26.9)**	**9 (34.6)**
My practice/clinical supervision meetings in Placement 2 are arranged in advance	**6 (23.1)**	**7 (26.9)**	4 (15.4)	4 (15.4)	2 (7.7)	2 (7.7)	1 (3.8)
My practice/clinical supervisor in placement 2 and I both draw up an agenda for supervision together	**6 (23.1)**	**7 (26.9)**	2 (7.7)	5 (19.2)	2 (7.7)	2 (7.7)	2 (7.7)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.14 Placement 2 (commitment subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My practice/clinical supervisor in placement 2 is enthusiastic about supervising me	**11 (44.0)**	**7 (28.0)**	4 (16.0)	1 (4.0)	1 (4.0)	0 (0)	1 (4.0)
My practice/clinical supervisor in placement 2 appears interested in supervising me	**11 (44.0)**	**8 (32.0)**	0 (0)	1 (4.0)	1 (4.0)	1 (4.0)	1 (4.0)

My practice/clinical supervisor in placement 2 appears uninterested in me	0 (0)	0 (0)	1 (4.0)	3 (12.0)	1 (4.0)	**8 (32.0)**	**12 (48.0)**
My practice/clinical supervisor in placement 2 appears interested in me as a person	**8 (32.0)**	**11 (44.0)**	2 (8.0)	2 (8.0)	2 (8.0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 2 appears to like supervising	**11 (44.0)**	**7 (28.0)**	2 (8.0)	2 (8.0)	2 (8.0)	0 (0)	1 (4.0)
I feel like a burden to my practice/clinical supervisor in placement 2	1 (3.0)	3 (12.0)	1 (4.0)	3 (12.0)	2 (8.0)	**9 (36.0)**	**6 (24.0)**
My practice/clinical supervisor in placement 2 is approachable	**11 (44.0)**	**10 (40.0)**	0 (0)	1 (4.0)	0 (0)	2 (8.0)	1 (4.0)
My practice/clinical supervisor in placement 2 is available to me	**10 (40.0)**	**8 (32.0)**	**4 (16.0)**	1 (4.0)	0 (0)	1 (4.0)	1 (4.0)
My practice/clinical supervisor in placement 2 pays attention to my spoken feelings and anxieties	**8 (32.0)**	**10 (40.0)**	2 (8.0)	3 (12.0)	1 (4.0)	0 (0)	1 (4.0)
My practice/clinical supervisor in placement 2 appears interested in my development as a professional	**11 (44.0)**	**9 (36.0)**	1 (4.0)	2 (8.0)	0 (0)	1 (4.0)	1 (4.0)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.15 Placement 2 (reflective education subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My practice/clinical supervisor in placement 2 encourages me to reflect on my practice	**12 (48.0)**	**7 (28.0)**	**4 (16.0)**	1 (4.0)	1 (4.0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 2	**11 (44.0)**	**10 (40.0)**	2 (8.0)	1 (4.0)	0 (0)	0 (0)	1 (4.0)

links theory and practice well							
My practice/clinical supervisor in placement 2 pays close attention to the process of supervision	**11 (44.0)**	**7 (28.0)**	3 (12.0)	2 (8.0)	0 (0)	1 (4.0)	1 (4.0)
My practice/clinical supervisor in placement 2 acknowledges the power differential between supervisor and supervisee	**9 (36.0)**	**5 (20.0)**	**4 (16.0)**	**5 (20.0)**	0 (0)	1 (4.0)	1 (4.0)
My practice/clinical supervisor in placement 2 pays attention to my unspoken feelings and anxieties	**8 (32.0)**	**9 (36.0)**	1 (4.0)	3 (12.0)	1 (4.0)	2 (8.0)	1 (4.0)
My p**ractice**/clinical supervisor in placement 2 facilitates interesting and informative discussions in supervision	**10 (40.0)**	**8 (32.0)**	3 (12.0)	2 (8.0)	1 (4.0)	0 (0)	1 (4.0)
I learn a great deal from observing my practice/clinical supervisor in placement 2	**10 (40.0)**	**9 (36.0)**	2 (8.0)	3 (12.0)	1 (4.0)	0 (0)	0 (0)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.16 Placement 2 (role model subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My practice/clinical supervisor in placement 2 is knowledgeable	**15 (62.5)**	**8 (33.3)**	1 (4.2)	0 (0)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 2 is an experienced pharmacy professional	**14 (58.3)**	**10 (41.7)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
I respect my placement 2 practice/clinical supervisor's skills	**14 (58.3)**	**10 (41.7)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 2 is knowledgeable about	**14 (58.3)**	**10 (41.7)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

the organisational system in which they work							
Colleagues appear to respect my Placement 2 practice/clinical supervisor's views	**12 (50.0)**	**12 (50.0)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 2 gives me practical support	**9 (37.5)**	**12 (50.0)**	3 (12.5)	0 (0)	0 (0)	0 (0)	0 (0)
I respect my practice/clinical supervisor in placement 2 as a pharmacy professional	**12 (50.0)**	**11 (45.8)**	0 (0)	0 (0)	0 (0)	0 (0)	1 (4.2)
My practice/clinical supervisor in placement 2 is respectful of patients	**14 (58.3)**	**10 (41.7)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
I respect my practice/clinical supervisor in placement 2 as a person	**13 (54.2)**	**10 (41.7)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 2 appears uninterested in his / her patients	0 (0)	3 (12.5)	0 (0)	0 (0)	o (0)	7 (29.2)	14 (58.3)
My practice/clinical supervisor in placement 2 treats his / her colleagues with respect	**12 (50.0)**	**10 (41.7)**	0 (0)	0 (0)	0 (0)	0 (0)	2 (8.3)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.17 Placement 2 (formative feedback subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My practice/clinical supervisor in placement 2 gives me helpful negative feedback on my performance	**6 (25.0)**	**10 (41.7)**	**5 (20.8)**	2 (8.3)	0 (0)	1 (4.2)	0 (0)
My practice/clinical supervisor in placement 2 can balance negative feedback on my performance with praise	**7 (29.2)**	**13 (54.2)**	0 (0)	3 (12.5)	1 (4.2)	0 (0)	0 (0)

My practice/clinical supervisor in placement 2 gives me positive feedback on my performance	**10 (41.7)**	**10 (41.7)**	1 (4.2)	2 (8.3)	1 (4.2)	0 (0)	0 (0)
My placement 2 practice/clinical supervisor's feedback on my performance is constructive	**8 (33.3)**	**12 (50.0)**	1 (4.2)	2 (8.3)	1 (4.2)	0 (0)	0 (0)
My practice/clinical supervisor in placement 2 pays attention to my level of competence	**8 (33.3)**	**12 (50.0)**	2 (8.3)	0 (0)	2 (8.3)	0 (0)	0 (0)
My practice/clinical supervisor in placement 2 helps me identify my own learning needs	**11 (45.8)**	**7 (29.2)**	2 (8.3)	1 (4.2)	3 (12.5)	0 (0)	0 (0)
My practice/clinical supervisor in placement 2 does not consider the impact of my previous skills and experience on my learning needs	2 (8.3)	4 (16.7)	0 (0)	3 (12.5)	3 (12.5)	**7 (29.2)**	**5 (20.8)**
My practice/clinical supervisor in placement 2 thinks about my training needs	**9 (37.5)**	**9 (37.5)**	4 (16.7)	1 (4.2)	0 (0)	1 (4.2)	0 (0)
My practice/clinical supervisor in placement 2 gives me regular feedback on my performance	**10 (41.7)**	**8 (33.3)**	4 (16.7)	1 (4.2)	0 (0)	1 (4.2)	0 (0)
As my skills and confidence grow, my practice/clinical supervisor in placement 2 adapts supervision to take this into account	**12 (50.0)**	**7 (29.2)**	2 (8.3)	1 (4.2)	2 (8.3)	0 (0)	0 (0)
My practice/clinical supervisor in placement 2 tailors supervision to my level of competence	**11 (45.8)**	**8 (33.3)**	3 (12.5)	1 (4.2)	1 (4.2)	0 (0)	0 (0)

**Items had missing data. Percentages are based on the number of item responses.*

Placement 3

12.1.18 Placement 3 (safe subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My clinical/placement supervisor in placement 3 is respectful of my views and ideas	**7 (43.8)**	**7 (43.8)**	2 (12.5)	0 (0)	0 (0)	0 (0)	0 (0)
My c**linical**/placement supervisor in placement 3 and I are equal partners in supervision	**6 (37.5)**	**7 (43.8)**	3 (18.8)	0 (0)	0 (0)	0 (0)	0 (0)
My clinical/placement supervisor in placement 3 have a collaborative approach in supervision	**5 (31.3)**	**8 (50.0)**	2 (12.5)	1 (6.3)	0 (0)	0 (0)	0 (0)
I feel safe in my supervision meetings in placement 3	**8 (50.0)**	**6 (37.5)**	1 (6.3)	1 (6.3)	0 (0)	0 (0)	0 (0)
My clinical/placement supervisor in placement 3 is non-judgemental in supervision	**8 (50.0)**	**6 (37.5)**	1 (6.3)	1 (6.3)	0 (0)	0 (0)	0 (0)
My clinical/placement supervisor in placement 3 treats me with respect	**9 (56.3)**	**7 (21.2)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
My clinical/placement supervisor in placement 3 is open-minded in supervision	**8 (50.0)**	**6 (37.5)**	2 (12.5)	0 (0)	0 (0)	0 (0)	0 (0)
Feedback on my performance from my clinical/placement supervisor in placement 3 feels like criticism	0 (0)	1 (6.3)	0 (0)	1 (6.3)	0 (0)	**7 (43.8)**	**7 (43.8)**
The advice I receive from my clinical/placement supervisor in placement 3 is prescriptive rather than collaborative	0 (0)	3 (18.8)	0 (0)	**8 (50.0)**	0 (0)	2 (12.5)	3 (18.8)

I feel able to discuss my concerns with my clinical/placement supervisor in placement 3 openly	**7 (43.8)**	**7 (43.8)**	**2 (12.5)**	0 (0)	0 (0)	0 (0)	0 (0)
Supervision in placement 3 feels like an exchange of ideas	**6 (37.5)**	**7 (43.8)**	**2 (12.5)**	1 (6.3)	0 (0)	0 (0)	0 (0)
My clinical/placement supervisor in placement 3 gives feedback in a way that feels safe	**8 (50.0)**	**7 (43.8)**	1 (6.3)	0 (0)	0 (0)	0 (0)	0 (0)
My clinical/placement supervisor in placement 3 treats me like an adult	**9 (56.3)**	**7 (43.8)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
I can be open with my clinical/placement supervisor in placement 3	**7 (43.8)**	**6 (37.5)**	3 (18.8)	0 (0)	0 (0)	0 (0)	0 (0)
I feel if I discuss my feelings openly with my clinical/placement supervisor in placement 3, I would be negatively evaluated	1 (6.3)	2 (12.5)	0 (0)	1 (6.3)	1 (6.3)	**4 (25.0)**	**7 (43.8)**

**Items had missing data. Percentages are based on the number of item responses*

12.1.19 Placement 3 (structure subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My clinical/placement supervisor in placement 3 meetings take place regularly	**7 (43.8)**	3 (18.8)	3 (18.8)	0 (0)	2 (12.5)	1 (6.3)	0 (0)
My practice/clinical supervision meetings in placement 3 are structured	**7 (43.8)**	**4 (25.0)**	1 (6.3)	0 (0)	3 (18.8)	1 (6.3)	0 (0)

My clinical/placement supervisor in placement 3 makes sure that our supervision meetings are kept free from interruptions	**6 (37.5)**	**5 (31.3)**	2 (12.5)	3 (18.8)	0 (0)	0 (0)	0 (0)
Supervision meetings in placement 3 are regularly cut short by my practice/clinical supervisor	1 (6.3)	1 (6.3)	0 (0)	2 (12.5)	0 (0)	**7 (43.8)**	**5 (31.3)**
Practice/clinical supervision meetings in placement 3 are focused	**6 (37.5)**	**6 (37.5)**	1 (6.3)	2 (12.5)	1 (6.3)	0 (0)	0 (0)
My practice/clinical supervision meetings in Placement 3 are disorganised	1 (6.3)	1 (6.3)	1 (6.3)	0 (0)	0 (0)	**8 (50.0)**	**5 (31.3)**
My practice/clinical supervision meetings in Placement 3 are arranged in advance	**4 (25.0)**	**7 (43.8)**	2 (12.5)	1 (6.3)	1 (6.3)	1 (6.3)	0 (0)
My practice/clinical supervisor in placement 3 and I both draw up an agenda for supervision together	**4 (25.0)**	**6 (37.5)**	1 (6.3)	2 (12.5)	1 (6.3)	2 (12.5)	0 (0)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.20 Placement 3 (commitment subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My practice/clinical supervisor in placement 3 is enthusiastic about supervising me	**5 (31.3)**	**7 (43.8)**	1 (6.3)	2 (12.5)	0 (0)	1 (6.3)	0 (0)

My practice/clinical supervisor in placement 3 appears interested in supervising me	**5 (31.3)**	**8 (50.0)**	1 (6.3)	1 (6.3)	1 (6.3)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 appears uninterested in me	0 (0)	1 (6.3)	0 (0)	3 (18.8)	0 (0)	**6 (37.5)**	**6 (37.5)**
My practice/clinical supervisor in placement 3 appears interested in me as a person	**5 (31.3)**	**7 (43.8)**	1 (6.3)	2 (12.5)	0 (0)	0 (0)	1 (6.3)
My practice/clinical supervisor in placement 3 appears to like supervising	**5 (31.3)**	**9 (56.3)**	0 (0)	1 (6.3)	0 (0)	1 (6.3)	0 (0)
I feel like a burden to my practice/clinical supervisor in placement 3	1 (6.3)	3 (18.8)	0 (0)	1 (6.3)	1 (6.3)	**5 (31.3)**	**5 (31.3)**
My practice/clinical supervisor in placement 3 is approachable	**8 (50.0)**	**7 (43.8)**	1 (6.3)	0 (0)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 is available to me	**6 (37.5)**	**7 (43.8)**	3 (18.8)	0 (0)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 pays attention to my spoken feelings and anxieties	**7 (43.8)**	**7 (43.8)**	2 (12.5)	0 (0)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 appears interested in my development as a professional	**8 (50.0)**	**7 (43.8)**	1 (6.3)	0 (0)	0 (0)	0 (0)	0 (0)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.21 Placement 3 (reflective education subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My practice/clinical supervisor in	**6 (37.5)**	**9 (56.3)**	0 (0)	1 (6.3)	0 (0)	0 (0)	0 (0)

placement 3 encourages me to reflect on my practice							
My practice/clinical supervisor in placement 3 links theory and practice well	**5 (31.3)**	**9 (56.3)**	1 (6.3)	1 (6.3)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 pays close attention to the process of supervision	**5 (31.3)**	**7 (43.8)**	1 (6.3)	1 (6.3)	2 (12.5)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 acknowledges the power differential between supervisor and supervisee	**5 (31.3)**	**4 (25.0)**	1 (6.3)	**3 (18.8)**	1 (6.3)	**2 (12.5)**	0 (0)
My practice/clinical supervisor in placement 3 pays attention to my unspoken feelings and anxieties	**6 (37.5)**	**6 (37.5)**	2 (12.5)	2 (12.5)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 facilitates interesting and informative discussions in supervision	**6 (37.5)**	**8 (50.0)**	0 (0)	1 (6.3)	1 (6.3)	0 (0)	0 (0)
I learn a great deal from observing my practice/clinical supervisor in placement 3	**7 (43.8)**	**7 (43.8)**	2 (12.5)	0 (0)	0 (0)	0 (0)	0 (0)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.22 Placement 3 (role model subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My practice/clinical supervisor in placement 3 is knowledgeable	**9 (56.3)**	**7 (43.8)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 is an experienced pharmacy professional	**10 (62.5)**	**5 (31.3)**	1 (6.3)	0 (0)	0 (0)	0 (0)	0 (0)
I respect my placement 3 practice/clinical supervisor's skills	**11 (68.8)**	**5 (31.3)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 is knowledgeable about the organisational system in which they work	**9 (56.3)**	**6 (37.5)**	1 (6.3)	0 (0)	0 (0)	0 (0)	0 (0)
Colleagues appear to respect my Placement 3 practice/clinical supervisor's views	**10 (62.5)**	**6 (37.5)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 gives me practical support	**8 (50.0)**	**8 (50.0)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
I respect my practice/clinical supervisor in placement 3 as a pharmacy professional	**10 (62.5)**	**6 (37.5)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 is respectful of patients	**10 (62.5)**	**6 (37.5)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

I respect my practice/clinical supervisor in placement 3 as a person	**10 (62.5)**	**6 (37.5)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 appears uninterested in his / her patients	0 (0)	1 (6.3)	1 (6.3)	0 (0)	0 (0)	**6 (37.5)**	**8 (50.0)**
My practice/clinical supervisor in placement 3 treats his / her colleagues with respect	**10 (62.5)**	**6 (37.5)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

**Items had missing data. Percentages are based on the number of item responses.*

12.1.23 Placement 3 (formative feedback subscale)

Statement*	Strongly agree (%)	Agree (%)	Slightly agree (%)	Neither agree nor disagree (%)	Slightly disagree (%)	Disagree (%)	Strongly disagree (%)
My practice/clinical supervisor in placement 3 gives me helpful negative feedback on my performance	**4 (25.0)**	**9 (56.3)**	1 (6.3)	1 (6.3)	1 (6.3)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 can balance negative feedback on my performance with praise	**5 (31.3)**	**9 (56.3)**	1 (6.3)	1 (6.3)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 gives me positive feedback on my performance	**6 (37.5)**	**10 (62.5)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
My placement 3 practice/clinical	**7 (43.8)**	**8 (50.0)**	0 (0)	0 (0)	0 (0)	1 (6.3)	0 (0)

supervisor's feedback on my performance is constructive							
My practice/clinical supervisor in placement 3 pays attention to my level of competence	**6 (37.5)**	**10 (62.5)**	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 helps me identify my own learning needs	**5 (31.3)**	**9 (56.3)**	1 (6.3)	1 (6.3)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 does not consider the impact of my previous skills and experience on my learning needs	1 (6.3)	3 (18.8)	0 (0)	1 (6.3)	0 (0)	**6 (37.5)**	**5 (31.3)**
My practice/clinical supervisor in placement 3 thinks about my training needs	**6 (37.5)**	**7 (43.8)**	1 (6.3)	1 (6.3)	1 (6.3)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 gives me regular feedback on my performance	**7 (43.8)**	**6 (37.5)**	0 (0)	1 (6.3)	0 (0)	2 (12.5)	0 (0)
As my skills and confidence grow, my practice/clinical supervisor in placement 3 adapts supervision to take this into account	**6 (37.5)**	**7 (43.8)**	1 (6.3)	2 (12.5)	0 (0)	0 (0)	0 (0)
My practice/clinical supervisor in placement 3 tailors supervision to my level of competence	**6 (37.5)**	**8 (50.0)**	1 (6.3)	1 (6.3)	0 (0)	0 (0)	0 (0)

**Items had missing data. Percentages are based on the number of item responses*

Glossary of terms

APTUK	Association of Pharmacy Technicians UK
CCA	Company Chemists Association
CCG	Clinical Commissioning Group
CPWS	Community Pharmacy Workforce Survey
CSU	Commissioning Support Units
ES	Educational supervisor
HEE	Health Education England
ICS	Integrated Care System
NHSBSA	NHS Business Services Authority
NHSE/I	NHS England and NHS Improvement
NPA	National Pharmacy Association
PhIF	Pharmacy Integration Fund
PCN	Primary Care Network
PS	Practice supervisor
PSNC	Pharmaceutical Services Negotiating Committee
PTPT	Pre-registration Pharmacy Technician
RPS	Royal Pharmaceutical Society
STP	Sustainability and Transformation Plan
UoM	University of Manchester