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South East London Foundation Pharmacist Vocational Training Scheme: General Practice Rotation Evaluation

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Glossary

Acronym/Term	Meaning in the context of this report
GP supervisor	General practitioner working in the general practice setting and supervising a foundation pharmacist.
Pharmacist supervisor	Pharmacist working in the general practice setting and supervising a foundation pharmacist.
Foundation pharmacist	Foundation pharmacist taking part in the vocational training scheme
Educational Supervisor	Pharmacist who provides peripatetic supervision and supports the development and progress of the foundation pharmacist across the SEL FP VTS programme.
Training Programme Director	Pharmacist responsible for design, development and implementation of SEL FP VTS pilot.
CEPIP	Clinically Enhanced Pharmacist Independent Prescribing course
GPhC	General Pharmaceutical Council
MDT	Multidisciplinary team
PCN	Primary Care Network
SEL FP VTS	South East London Foundation Pharmacist Vocational Training Scheme
QOF	Quality Outcomes Framework
WBA	Workplace-based assessment; also known as supervised learning events (SLEs)

Background

The landscape of the pharmacy workforce is dramatically changing with the evolution of pharmacists' roles in response to the Five Year Forward View[1] and more recently the NHS Long Term Plan.[2] The vision for pharmacy includes a pharmacist workforce able to work across integrated care pathways, and providing clinical, patient-centred care. This is a move away from silo working in the traditional main sectors of community and hospital pharmacy practice. To enable this change, the importance of cross-sector foundation training for newly qualified pharmacists has been recognised. Such foundation training provides opportunities to develop pharmacists' knowledge, skills, behaviours and attributes to work across different sectors of care, whilst gaining a wider understanding of the NHS system and patient journey, and enabling pharmacists to work across the wider integrated care system.

Health Education England London and the South East (HEE LASE) Pharmacy commissioned three pilot programmes across the region to test different models of foundation training provision. This evaluation reports on one of these programmes, the South East London Foundation Pharmacist Vocational Training Scheme (SEL FP VTS) and focuses on the GP placement aspect of this pilot.

South East London Foundation Pharmacist Vocational Training Scheme

SEL FP VTS was a three-year multi-sector programme that ran from October 2017 to December 2020 and integrated community, hospital, NHS London Procurement Partnership (NHS LPP) and GP practice placements. The programme also integrated the General Pharmaceutical Council (GPhC) accredited Kings College London Clinically Enhanced Pharmacist Independent Prescribing (CEPIP) course **(Appendix 1)**.

The SEL FP VTS includes completion of a portfolio of evidence to demonstrate competency against elements across the programme and sectors, including workplace-based assessments (WBAs), also known as supervised learning events (SLEs) **[Appendix 2]**. The programme was underpinned by the NHS Education for Scotland (NES) Foundation Framework; a Royal Pharmaceutical Society (RPS) accredited competency framework. Towards the end of Year 2 and beginning of Year 3, SEL FP VTS pharmacists started a 6 month placement in general practice, where they were supported by a general practice based pharmacist, a general practitioner (GP) and a SEL FP VTS peripatetic educational supervisor. During the GP placement, foundation pharmacists were required to take on a mixture of medicines leadership roles and clinical/patient-facing roles set out by the programme **(Table 1)**.

Table 1: Overview of the areas of practice and potential role development of SEL VTS foundation pharmacist during GP Practice placement *

Medicines Leadership Roles (undertaken within the first 3 months of GP placement)	
Medicines Liaison Work	• Integration of GP practice with local health and social care teams, community and hospital pharmacy teams, care homes and CCG • Participation in practice education including teaching junior staff • Medicines reconciliation at transfer of care
Practice Policy and Processes	• Repeat prescribing (and dispensing) • Medicines monitoring including high-risk medicines call and recall systems.
Quality Improvement Activities	• Use of software tools to identify areas for improvement • NHS and Local QiPP (Quality, Innovation, Productivity and Prevention) activities • Audit
Clinical/Patient-facing roles (expected that 25% of the foundation pharmacists time is patient facing by the end of rotation)	
Core Clinical Skills	• Consultation • Clinical Assessment • Disease Prevention
Core Clinical Roles	• Medicines-related Enquires • Medication Reviews • Managing Long Term Condition - Non-complex • NHS Health Check

**Taken from SEL FP VTS Foundation Pharmacist in General Practice Rotation Handbook, adapted from CPPE GP Pathway (2019). Not all areas needed to be completed during the GP placement as opportunities differed between GP practices service models, but a blend of patient facing and non-patient facing experience and a minimum of 25% patient-facing experience had to be included.*

Salaries for foundation pharmacists were paid by their primary employer in community or hospital pharmacy. GP practices were provided with a training grant for foundation pharmacists' training and supervision, and for contributing to the development of these placements. HEE LaSE and SEL FP VTS Training Programme Director (TPD) provided guidance and a handbook containing educational objectives for the placement and support materials to GP sites, developed in conjunction with colleagues from CPPE.

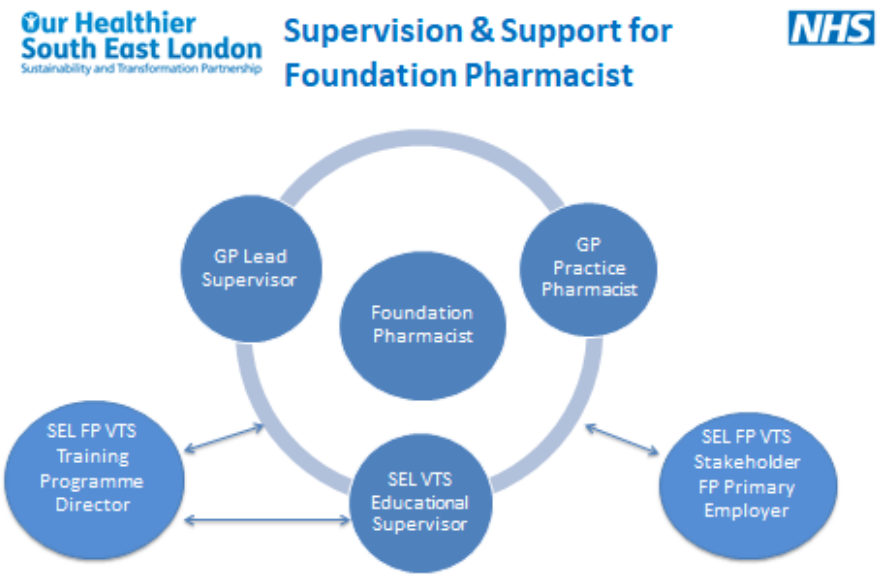
For community pharmacy employed foundation pharmacists, the GP placement was integrated into year 3 to support completion of CEPIP practice hours' requirements. For the last 1-2 months of placement, a flexible working schedule for GP placements was agreed with community pharmacy

employers and GP supervisors to allow the remaining placement hours to be spread over a longer time period to support completion of CEPIP practice hours across the programme e.g. split working weeks. However, this plan required significant revision due to the impact of COVID-19 on primary care service provision and staff redeployment. See **Effects of Covid-19 on GP placement experience** for further detail.

Additional supervision was provided by the SEL FP VTS peripatetic educational supervisor (ES) who supported and reviewed the foundation pharmacist's progress against the educational objectives during the GP placement and throughout the SEL VTS programme.

Support was also available from the training programme director (TPD) whose role was to design, develop and implement SEL FP VTS GP placements and to ensure that foundation pharmacists received educational support within the foundation pharmacist programme by liaising with general practice leads and supervisors to ensure they were aware of the programme requirements; employment models and associated procedures; educational support and communication processes **(Figure 1)**.

Figure 1: SEL FP VTS GP Placements Supervision Model



Study Aim

The aim of this study was to evaluate implementation of general practice placements for foundation pharmacists on the SEL FP VTS, and to identify the enablers and barriers to a successful vocational foundation training placement in general practice.

The **main objectives** were to:

- explore foundation pharmacists experience of undertaking six-month placements in general practice
- establish which knowledge and skills foundation pharmacists gained during their general practice placements
- identify enablers and barriers to achieving competencies in general practice
- explore the experience, and impact of hosting foundation pharmacist foundation pharmacists on general practice supervisors, with a particular focus on supervision requirements and service contribution.

Methodology

This study used a **qualitative study design** to identify foundation pharmacists' and supervisors' views on foundation pharmacist placements in general practice. Semi-structured telephone interviews were conducted between April and July 2020.

The **sampling strategy** involved recruitment for detailed, semi-structured telephone interviews (up to 45 minutes) with all eight foundation pharmacists involved. These were followed by focused interviews (up to 15 minutes) with 13 supervisors. The sample size for supervisors was determined by the point at which data saturation was reached.

The **topic guides** used in the interviews were developed from the literature[3-7] and revised through discussion amongst the research team and the commissioners at HEE LaSE. Interview questions were tailored to understand foundation pharmacist expectations of GP placement participation, learning and practice experiences, knowledge and skills gained, as well as competence and confidence to apply these in the general practice setting. Views on GP placement structure and available support were also gathered, along with views on potential barriers or unmet support or learning needs. Shorter/focused interviews with supervisors were informed by interviews with foundation pharmacists and focused on supervisors' views on the role of foundation pharmacists during the general practice rotation, requirements for supervising a foundation pharmacist and the impact of having a foundation pharmacist on the general practice.

All interviews were audio-recorded, with written or verbal consent, and transcribed verbatim by a university approved transcribing company. Analysis was aided by the use of NVivo, a software package that stores and arranges non-numerical data. **Interview transcripts were analysed using thematic analysis**, a widely used method for analysing qualitative data through the identification of patterns within the data.[8] This method provides rich detailed descriptions of the dataset under meaningful themes. The research team considered how the themes fit in relation to each other and the research objectives.

Results

All foundation pharmacists (n=8) involved in the SEL FP VTS took part in the study. Four foundation pharmacists completed the GP placement prior to the CEPIP, two undertook the CEPIP course during the GP placement and two did not undertake CEPIP. Of the 15 supervisors approached, 13 consented to take part in the study **(Table 2)**.

TABLE 2: PARTICIPANT CHARACTERISTICS

Participants	Employment sector [a, b]
Foundation pharmacist 1	Community pharmacy
Foundation pharmacist 2	Hospital
Foundation pharmacist 3	Hospital
Foundation pharmacist 4	Hospital
Foundation pharmacist 5	Community pharmacy
Foundation pharmacist 6	Hospital
Foundation pharmacist 7	Hospital
Foundation pharmacist 8	Community pharmacy
Supervisor 1 (GP)	
Supervisor 2 (GP)	
Supervisor 3 (pharmacist)	
Supervisor 4 (pharmacist)	
Supervisor 5 (GP)	
Supervisor 6 (pharmacist)	
Supervisor 7 (GP)	
Supervisor 8 (GP)	
Supervisor 9 (pharmacist)	
Supervisor 10 (GP)	
Supervisor 11 (pharmacist)	
Supervisor 12 (pharmacist)	
Supervisor 13 (pharmacist)	

a: See Appendix 1 for timetable of hospital and community pharmacy employed foundation pharmacists. Hospital employed foundation pharmacists finished their GP placements prior to independent prescribing course (CEPIP). Community pharmacy employed foundation pharmacists had the independent prescribing course during the GP placement. Two foundation pharmacists did not taken the CEPIP course.

b: Foundation pharmacists were employed by different organisations across SEL.

Foundation pharmacists' reasons for undertaking GP placements

The main motivation for foundation pharmacists to undertake GP placements was to gain experience of working in general practice early in their careers. Some foundation pharmacists were already interested in working in general practice after the foundation programme and wanted to make the

most of their GP placement. Other foundation pharmacists were undecided about their future but were considering working general practice. Foundation pharmacists felt a GP placement offered a good opportunity to explore the role of a pharmacist in general practice and to develop understanding of the patient pathway.

> *"I think I had an interest in the GP role, but I knew it was quite new, so I thought it would be a good chance to gain a good insight into it, and see how it is on a day to day basis. I'd heard mixed things about the GP role, but it was something that interested me, so yeah, I just went for the training, because I thought it would be a really good chance to get six months' experience there, and it's not like I have to leave my current role, and go into GP land". (Foundation pharmacist 2, hospital employed)*

> *"I was interested in going into general practice or primary care, going forward after the foundation programme, so I thought it would be quite crucial for me to get this experience". (Foundation pharmacist 3, community pharmacy employed)*

Structure of the training placement

Duration of GP placement

Foundation pharmacists and supervisors agreed that six months was the minimum duration required for the GP placement to allow a foundation pharmacist to settle in and learn how to play an active role that would contribute to the GP site. GP supervisors felt a placement of less than 6 months would prevent foundation pharmacists from gaining a good understanding of working in general practice and would be insufficient time to allow them to carry out some of the roles of a practice pharmacist independently. Most foundation pharmacists and supervisors suggested a longer placement (6-9 months) would have supported further development.

> *"It's got to be a minimum of six months… less than six months would be problematic to be honest, they wouldn't get as much out of it as they did. You could do three months and they could learn how to do NHS health checks, maybe blood pressure clinics and medicines reconciliation, but you couldn't then reasonably expect them to be able to manage diabetes and asthma? So the longer they're with us, the more they'll get out of it, but I would think six months would be reasonable and actually is an incentive for practices, practices wouldn't want them there for less than six months because they'd say, what's the point of that, by the time you induct them and get them up to speed, they've only got six weeks left. So the practice doesn't get much benefit then". (Supervisor 8, GP)*

Foundation pharmacists undertaking the GP placement and the Independent Prescribing course (CEPIP) simultaneously emphasised the need for a longer placement to compensate for time lost at the GP site because of the IP course. Foundation pharmacists had 2.5 months of GP placement time prior to the start of CEPIP course to focus on GP placement requirements. Whilst foundation pharmacists benefited from having the CEPIP course simultaneously with the GP placement, they found it challenging to do both in 3.5 months of the placement. Similarly, supervisors felt it was too ambitious for their foundation pharmacists to do CEPIP and the GP placement within a 3.5 month timeframe.

Location of the GP placement within the 3 year foundation programme

Foundation pharmacists' opinions varied on the timing of the GP placement in relation to the overall 3-year foundation pathway **(Appendix 1)**. Some foundation pharmacists would have preferred the GP placement after completing their first year of hospital and community pharmacy placements. They did not favour switching back and forth between community and hospital over 2 years before going to the GP placement. A minority thought it would be more beneficial to have two GP rotations; one early in the foundation training programme and another one towards the end to consolidate learning.

> *"I didn't like the fact that we had to go back to hospital after six months and go back into the community, mentally it's not great for a person to have to keep switching, adapting and then getting back into the new role". (Foundation pharmacist 1, community pharmacy employed)*

> *"I think it [the GP placement] could have come a bit earlier, to be honest. Because we did, like six months hospital, and then six months community, then six months hospital again, three months community, and then this. So, I feel like it should have come earlier. Yeah, I think not too early…I think my experience of hospital and community helped me a lot to do the role. So I would still do hospital or community first, and then do GP as like a third placement…rather than going back to hospital and community again, and then coming here". (Foundation pharmacist 2, hospital employed)*

On the other hand, some foundation pharmacists felt they needed to develop their skills in hospital and community pharmacy over two years before going into general practice.

> *"I thought it was at a good time to do the placement [after second year]. Because I had enough knowledge, enough experience in hospital and community, to then be able to understand both sides. And then when I went into primary care, it was a mixture of both, where I could use my experiences in community and hospital, in the primary setting". (Foundation pharmacist 7, hospital employed)*

> *"It couldn't really be put anywhere else because, when you are newly qualified, I don't think you really necessarily have the experience yet or the confidence to be going into a GP placement. Whereas we've been qualified for two years; […] we knew hospital well, we knew community well, so we had that confidence behind us to then go into a GP practice, who may not know pharmacists at all really". (Foundation pharmacist 4, hospital employed)*

Managing transition to GP sector

The main challenge encountered by foundation pharmacists was initially identifying their limitations and scope of practice in the GP setting. All foundation pharmacists reported that unlike other placements where the pharmacist role is well-established, they had to be proactive to assert their position in general practice and be given more opportunities. Moreover, foundation pharmacists mentioned initially having to adapt to the "slower-paced" GP environment where they had more flexible working hours compared to hospital/community.

> *"At the beginning it would be like, in terms of identifying what kind of tasks I can do. So, the challenge that I had was … in terms of protocols, like knowing where I can find different protocols and what kind of patients I can see. Not only identifying my limitations but also just knowing what my limitations are. At the beginning I had those challenges and just, like, explaining what I can do as well as what my role be". (Foundation pharmacist 5, community pharmacy employed)*

"I think it was more just seeing how proactive you need to be in terms of asserting the pharmacist position in the GP practice …if you're not proactive and if you only do the work that just comes to your face, then you don't really make the most out of your role in the practice, patients won't really know you're there, they won't realise that you're there to ask for help. If you're not proactive with your colleagues, then they won't really realise that, you know, they can ask you questions or queries, or anything like that. So I think that was something that I needed to learn, because obviously in community and hospital, your role is quite established so … people already know what you're there for, whereas in GP you have to make the most out of it. So I think that was the main challenge that I had to realise and really upped my activity and the different tasks I had to do". (Foundation pharmacist 3, hospital employed)

Overall, foundation pharmacists felt they managed the transition to the GP sector well. A number of factors contributed to this. Site preparedness was an important factor in facilitating transition to general practice. Sites that were well prepared for their arrival provided a structured induction and most GP staff had a good understanding of the capabilities of a foundation pharmacist.

"Everyone was quite well prepared with a structured induction programme, so I had a timetable set out already… there was already another pharmacist working in the GP practice as well, and they had all of that, the documentation, so they knew that I wasn't kind of at the level of the pharmacist who was already working there because they're a prescriber; so understood that I was still in training". (Foundation pharmacist 6, hospital employed)

"[When I started] I met the whole team, I shadowed them all, which was handy, so I could see what the nurses do, for example, so I can refer to them easily. I gained knowledge on how to lead consultations and stuff, and using the IT system in the practice as well. Yeah, just all the policy I became familiar with, so there was a lot of reading as well, and other training that they needed me to do". (Foundation pharmacist 2, hospital employed)

Conversely, some foundation pharmacists found the first few weeks challenging because the GP site was not well prepared, there was no formal induction and GP staff did not have a clear understanding of the roles and responsibilities of a foundation pharmacist.

"The [GP site] weren't really prepared at all. I felt really uncomfortable on my first week there, I felt like – you feel like a burden because you have to keep asking and you have to keep…obviously the first week is the most important week for you to get settled in, for you to get to know everyone, find your way, none of that happened…I felt so silly asking silly questions, so I felt just at one point, am I going to carry on with this because I don't have a clue what I'm doing". (Foundation pharmacist 1, community pharmacy employed)

"The [GP staff] didn't really know what the programme was to be honest. So, I was having to explain it to every single person that I spoke to. So, anyone that I shadowed, I would explain it to them, and I think…a lot of the GPs kind of thought that I was underexperienced and they just kept on comparing me to the last pharmacist that they had…which obviously she probably was more experienced than me. But I kept on being referred to as a junior pharmacist, which I don't think I am at this point in time". (Foundation pharmacist 8, community pharmacy employed)

Foundation pharmacists commonly described the support they received from their supervisors and other staff as making their transition to general practice easier. Moreover, most foundation pharmacists highlighted that their GP placement sites was a training practice and had one or more pharmacists already working there for queries/guidance. Furthermore, GP tutors highlighted that their organisation had the infrastructure for training healthcare professionals and the workforce to support foundation pharmacists.

"It was quite a kind of a natural transition for me. I think the support that I got from my GP supervisor was really good and it was nice individual support. Because obviously in community you don't get that kind of support just because you are the only pharmacist there. In hospital that support is often on a group basis rather than individual. Whereas in GP, because things are a little bit calmer and… the practice I was at is a training practice so they're used to GP trainees, so they're used to kind of taking time out from the day to debrief and go through things with you". (Foundation pharmacist 3, hospital employed)

Supervisors' expectations of foundation pharmacists during GP placement

GP and pharmacist supervisors had different expectations of what a foundation pharmacist should be able to do at the start of the placement. GP supervisors expected foundation pharmacists to be able to perform a range of medicines-related tasks relevant to general practice. These tasks commonly involved: handling medicines-related queries, reconciling medications, drug monitoring, dealing with discharge letters, offering repeat dispensing, carrying out medicines safety audits, and other aspects of medicines optimisation (e.g. MURs, inhaler techniques).

"I think towards the beginning, obviously this is post-induction really, I would expect them [foundation pharmacists] to be able to handle medicines-related correspondence, I would expect them to be able to add people to repeat dispensing, offer repeat dispensing, I would expect them to be able to carry out medicine safety audits and proactively contact patients who are overdue for their blood monitoring or any other monitoring that's required". (Supervisor 8, GP)

On the other hand, pharmacist supervisors had different expectations of what foundation pharmacists should be able to do at the start of the GP placement. They thought that foundation pharmacists should be able to address medication related queries and recognise their limitations, and signposting patients to the most appropriate healthcare professional. One pharmacist supervisor felt that foundation pharmacists should also be able to undertake clinical assessments when they first started.

"I think to begin with, they [foundation pharmacists] should be able to just deal with medication related queries. I think it's unfair to have that much of an expectation in terms of how you manage general practice patients". (Supervisor 3, pharmacist)

"I think at the beginning, it's really important… to do the background learning, because coming into GP practice, you need to be aware of red flags, in terms of patients will mention different things to you. You need to have that training, even if it's within early days of the role, that you recognise red flags and you recognise what to do in those circumstances in terms of liaising with the doctor, letting somebody know, or signposting them to a pharmacy". (Supervisor 4, pharmacist)

Both GP and pharmacist supervisors had similar views of what they thought foundation pharmacists should be able to do towards the end of the GP placement, such as reconcile medications, handle discharge summaries and medication queries confidently and competently. Supervisors also felt it was important for foundation pharmacists to have a good understanding of when they should refer patients onto a GP. In terms of patient-facing activities, supervisors considered that foundation pharmacists should have developed core clinical skills and be able to deliver structured medication reviews for patients with long-term conditions towards the end of the placement. However, supervisor opinions regarding the complexity of these structured medication reviews varied.

"Dealing with medication queries, doing medication reviews, doing medication reconciliation, also doing the safety audits, things like MARs [Medical Appraisal & Revalidation System], checking all those things, and also that aspect of medicines optimisation, so being aware, really, what happens in primary care as a pharmacist…So, I think almost I guess working like a practice pharmacist, obviously not to the same intensity and they're not going to have the same knowledge to do things, but essentially knowing the practice pharmacist [role]". (Supervisor 10, GP)

"The pharmacist should be able to conduct a full medication review… and so in my particular case, the training wasn't around one disease state [...] so, it could be blood pressure related medication, it could be asthma, it could be whatever the case was, just a general medication review, which would cover whichever medicines the patient's on. That's what I feel that a pharmacist should be able to do, and they should also be able to support, so if a patient is telling you different types of symptoms, they should know when they need to refer onto a GP, when it's severe, when there's red flags, they should know that, okay, this is actually an emergency situation, we need to call an ambulance. These kind of things, they should be able to do by the end of the rotation. And also blood tests. So… if a patient has come in, and you're doing a med review, but they've mentioned certain symptoms, then it may require blood tests before they are booked in with the doctor". (Supervisor 4, pharmacist)

Progression of types of activities undertaken by foundation pharmacists in GP placements and environment to support learning

The first half of a placement was focused on induction and learning administrative tasks. Initially, the first few weeks provided an induction where foundation pharmacists went through policies/procedures and shadowed clinicians as well as the administration team to understand how the GP site worked. All foundation pharmacists perceived nurses, healthcare assistants, physician associates, GPs and pharmacists (other than their tutors) to be very supportive and helpful. In relation to non-healthcare staff, most foundation pharmacists established a good relationship with the administration staff and felt they were very helpful with regards to system use and learning operational aspects of practice. Following this, foundation pharmacists had a flexible monthly plan which consisted of: administrative tasks (i.e. hospital letters, medicines reconciliation, medication queries, and repeat prescriptions), shadowing the pharmacist supervisors/other GP staff during clinics, and weekly tutorial with their GP tutor.

GP placements were mainly structured to support foundation pharmacists to learn the role of a pharmacist at the GP site. Foundation pharmacists commonly described their day-to-day work in general practice as a mixture of administrative and clinical tasks. The proportion of administrative to clinical work was dependent on the foundation pharmacists' experience. Overall, placements were organised to allow for gradual development of competence in administrative tasks and capability in running a clinic independently.

"I think what we wanted for her to develop was a role that was similar to mine. So basically, I wanted her role to end up mirroring mine. In the mornings we'd do some clinics, and she'd shadow that whilst I had consultations with patients. And then in the afternoon, we'd do a lot of, kind of, hospital letters, medicines reconciliation, medication queries, repeat prescriptions. So, it was trying to get a good balance between patient-facing and more, kind of…desk role, I suppose". (Supervisor 9, pharmacist)

"It built up over time. So, initially, I started off with doing reconciling of documentation that came in from hospitals or people requesting prescriptions. And then I also did some work auditing… And then, eventually, I went on to be shadowing pharmacists as they did blood pressure clinics and then I took on my own blood pressure clinic… and then also I'd do some telephone calls, which would be in the morning when patients call up and say, oh, I need to speak to a doctor. And then the receptionist would allocate them into pharmacists' slots to then be called back by a pharmacist. So, I would help with some of the more minor conditions, which would be picked out for me". (Foundation pharmacist 4, hospital employed)

Foundation pharmacists' confidence and competence developed over time. Most foundation pharmacists and supervisors did not feel confident for foundation pharmacists to provide services independently when they first started. There was a common understanding amongst all participants that foundation pharmacists had the knowledge and skills but needed to learn how to apply these to practice.

"So with me…at the beginning, it was learning how to do med reviews, doing the reconciliations from hospital into GP practice, and primary care… you're learning the system. So we're not familiar with the systems. So it's more learning the processes that occurred in a primary care setting, as opposed to in secondary care setting". (Foundation pharmacist 7, hospital employed)

"When they [trainee] first started…I think with my trainee, it [knowledge and skills] was there, but it was just calibrating to a new environment, getting used to the general primary care environment which is so different from community pharmacy and hospital care, and possibly more autonomous working. So she definitely had the skills, but it was just sort of translating that to this new environment which was initially a bit unfamiliar and building her confidence in the new environment". (Supervisor 10, GP)

Initially, foundation pharmacists needed direct supervision in all/most of the activities as they lacked experience of working in general practice. Foundation pharmacists mentioned that it took them longer to carry out activities in the beginning, as they often had to double-check with their pharmacist supervisor or other staff. Supervisors commonly mentioned having to spend considerable time with their foundation pharmacists at the beginning to ensure they were competent and confident in performing procedural tasks such as adding a repeat medication or carrying out basic clinical assessments. This direct supervision was also attributed to GP supervisors having limited experience of supervising pharmacists and therefore not fully confident in their ability to work independently.

"What we [both supervisors] did initially, was that we supervised her in all the activities before we were confident that she could undertake some of the things on her own. So we didn't let her loose, if you like, at the beginning on any of it… I hadn't supervised pharmacists before, and it was a pilot, so there was, I suppose, aspects of it that I didn't really fully feel confident with too". (Supervisor 2, GP)

All participants felt that foundation pharmacists' confidence grew as the placement progressed. Supervision became more arms-length with foundation pharmacists working independently when undertaking non-patient-facing activities with one-off queries and feeding back to their tutors when necessary.

During clinics, foundation pharmacists provided basic medication reviews for patients with common long-term conditions (i.e. asthma, hypertension) and some of the basic clinical assessments which were required during SEL FP VTS GP Practice placements **(See Table 3).**

TABLE 3: CORE CLINICAL ASSESSMENTS REQUIRED TO BE COMPLETED DURING SEL FP VTS GP PRACTICE PLACEMENTS

Core Clinical Assessments
• Blood pressure (manual) • Blood pressure (automated) • Heart rate (radial pulse) • Blood glucose • Respiratory rate • Respiratory function: peak expiratory flow rate • Peripheral oxygen saturation • Temperature • Height, weight and body mass index – training to be completed by GP supervisors *Additional clinical assessments skills training that may be completed upon agreement with GP & Pharmacist supervisors:* • *Urinalysis* • *Ear examination* • *Throat examination*

**Taken from the SEL FP VTS Foundation Pharmacist in General Practice Rotation Handbook*

All foundation pharmacists perceived nurses to be an integral part of learning how to structure consultations, whereas GPs were perceived to be a good source of advice for patient management and physical assessments. Moreover, some foundation pharmacists felt healthcare assistants contributed to their learning by providing them with insights into some aspects of NHS Health checks (e.g. blood pressures, diabetic food checks).

> *"I felt like I've learned quite a lot, especially when I joined with the nurses, I learned a lot of things around…the assessments that they do, which it is highly unlikely a pharmacist would do, around different conditions, which, I've learned quite a lot and, yeah, it was…it was good. Yeah. I benefited from it. For example, it would be when, so when I was sitting in on their consultation, they would let me do the consultation, they would supervise me, so that I would get the understanding as well as a view of my confidence before I get into my…into my own consultations on my own. So, they were good with giving me guidance". (Foundation pharmacist 5, community pharmacy employed)*

Towards the end of the placement, foundation pharmacists progressed from performing basic medication reviews/clinical assessments to undertaking more complex reviews, in addition to building on their administrative roles. Foundation pharmacists felt they could work independently and their supervisors were comfortable with their foundation pharmacists working without direct supervision as they gained trust in their abilities.

> *"A huge difference [in competence and confidence later on the placement]. Obviously I was a lot more confident. So working just as a GP pharmacist, I was working completely independent; towards the end I was given more responsibility… I mean initially it was a bit daunting but towards the end it was completely me working alone and you just naturally take the role". (Foundation pharmacist 1, community pharmacy employed)*

"By the end of the rotation, we were able to leave her [foundation pharmacist] to get on with things. Even whilst I wasn't supervising directly, I was confident that she was able to get things done by the end of it". (Supervisor 9, pharmacist)

In addition to administrative and clinical tasks, all foundation pharmacists participated in multi-disciplinary team (MDT) meetings. Most foundation pharmacists highly valued participating in MDT meetings because they provided opportunities for shared learning. They perceived that discussing cases with other healthcare professionals and seeing how they dealt with different patient case-scenarios informed their approaches to patient consultations.

"…every day there's a clinical meeting with all the doctors … it's nice to see from a medical point of view how different patients are dealt with and problems are solved. I think that's really good to see for a pharmacist because it gives you a different structure, you can see their thought process and apply it to your own problem-solving methods. We also had physician associates who would also be in the meetings and …it's kind of similar because they look at things from a medical point of view as well so it's good to see that. So I guess the kind of medical way of solving problems, you can apply that to your own pharmacy… it reinforced my consultation skills, it reinforced the way I approached patients and like problems that they might have". (Foundation pharmacist 3, hospital employed)

Integration within the MDT enabled foundation pharmacists to access a range of healthcare professionals for advice. Moreover, foundation pharmacists were able to refer patients to the most appropriate healthcare professional by understanding the roles of different clinicians within their practice. Other activities mentioned by some of the foundation pharmacists are provided in **Table 4.**

TABLE 4: LIST OF ACTIVITIES UNDERTAKEN BY FOUNDATION PHARMACISTS IN GENERAL PRACTICE

Activities undertaken by foundation pharmacists in general practice
• Shadowing GP staff • Medication queries • Requesting repeat prescriptions • Medication reconciliations • Minor ailments • Clinical assessments • NHS Health Checks • Audits • Telephone consultations • Face-to-face medication review clinics • Care home visits • Managing lab results • Participation in practice education

Roles of GP and pharmacist supervisors during the GP placement

GP supervisors structured the GP rotation plan with their foundation pharmacists which involved goal-setting, identifying learning needs and outlining expectations for the GP rotation. GP supervisors contribution to foundation pharmacists' learning was then mainly through formal weekly tutorial sessions where foundation pharmacists had protected time to discuss any queries and go through specific learning needs or workplace-based assessments. In most cases GP supervisors had a more

teaching/educational based role, whereas pharmacist supervisors were more involved in day-to-day training and supervision which often included repeat prescribing, drug queries, and discharge summaries from hospitals.

> *"Basically, we had a tutorial once a week for two and a half hours and then during the week we'd touch base on a daily basis. That was more a light touch, 10 – 15 minutes checking in. But the once a week tutorials would be…loosely based on her learning needs and maybe some portfolio stuff to fill in, but mainly clinical topics; to up-skill her knowledge base and directing her where to learn the things, which she knew already, but it was… putting it into practice. And then seeing patients together; she would see one, I would see one, joint clinics, giving her direct feedback on her communication skills… and then we did some other learning thing, like some virtual respiratory clinics at the hospital and we attended clinical meetings and education meetings; she came to them, and manager meetings". (Supervisor 1, GP)*

> *"So basically… my role is, kind of, broken down into several different parts. There's lots of tasks I carry out throughout the day. So basically, whenever I was doing something, I'd have her [foundation pharmacist] with me. So, we shared an office. So, every time I'd do something she'd be watching and then making notes and, kind of, learning how to do that. And I'd go ahead and watch her carry out the same task, so that …over a period of a month or two she'd probably mastered what it is that I'm doing, and I could, kind of, leave her independently to get on with work. And obviously… If she was stuck with someone who was quite difficult to deal with, she could always come to me for supervision and guidance". (Supervisor 9, pharmacist)*

Pharmacist supervisors were often the first point of call for foundation pharmacists' queries. Foundation pharmacists felt they should go to their pharmacist supervisors for day-to-day medication-related queries (e.g. medication management, prescriptions, audits) whilst GP supervisors were reserved for complex/clinical queries (e.g. physical examination skills, interpreting lab results).

> *"But I would always go through the pharmacist first because obviously she'd been there a lot longer than me and if she was unsure as well then I would take it to the next step, to the next person which would be the GP". (Foundation pharmacist 1, community pharmacy employed)*

> *"When I had my clinics, I would then go to that GP supervisor first, or if she wasn't available, then I would go to the pharmacist supervisor, or another GP and just discuss the patient with them. And, if it was stuff like medication reconciliation, or something else… then I could also discuss that with the pharmacist, if they were available, if they weren't busy. I think stuff like medicines reconciliation, I always went to the pharmacist for that. With medication reviews, I tended to go to the GP first… and if they weren't available, then the pharmacist yeah. So I think personally for my own development, I prefer this style of supervision because it's very individualised, you get protected time with your tutor to go through things, but at the same time, you can always ask anyone for help during the day. It's focused on you and it's focused on your specific development". (Foundation pharmacist 3, hospital employed)*

Assessing foundation pharmacists' progress during the GP placement

Supervisors mainly assessed their foundation pharmacists' progress by reviewing their placement objectives and using the workplace-based assessment (WBAs) **[Appendix 2]**. Most foundation pharmacists reported getting feedback from other clinicians who supervised them during consultations. The involvement of GP and pharmacist supervisors in assessing foundation pharmacists varied amongst different placement sites. In some sites, both GP and pharmacist supervisors had shared responsibilities, whereas in other sites, it was either the GP or pharmacist supervisor who was primarily involved in assessing the foundation pharmacist.

"They [tutors] both carried out work-based assessments and they both did the evaluation form for me as well; so it was kind of a mix of them both doing them". (Foundation pharmacist 6, hospital employed)

"So the pharmacist … wasn't involved at all in assessing me but the lead GP he assigned the assessment to whoever I was sitting with when I was being supervised during my consultation". (Foundation pharmacist 1, community pharmacy employed)

"I got both of them to do work-based assessments with me. The pharmacist supervisor did more with me. So, both of them helped me to achieve my training. Both of them [tutors] checked in on me to make sure that I was still progressing as expected". (Foundation pharmacist 4, hospital employed)

Foundation pharmacists had their own methods for recording/capturing competence. Some foundation pharmacists self-assessed their competence based on how much work they completed or the relative ease in which they carried out tasks at the GP placement. Other foundation pharmacists self-assessed their competence more systematically by entering details in their own excel spreadsheet as evidence in support of their development.

"If I was able to keep up with what they expected me to do for a day's work then I felt like I was doing good. I felt like do you know what today I've done good because I've done my work and I felt like I'm making good progress". (Foundation pharmacist 1, community pharmacy employed)

"So, using the documents that we were given before starting the placement, it basically outlined evidences that we needed to complete. So, I put all of that into an Excel sheet… And I just logged whether I'd completed it or not". (Foundation pharmacist 4, hospital employed)

Foundation pharmacists' perceptions of the benefit of WBA tools **(Appendix 2)** were strongly influenced by the ways they were used during the GP placement. One of the foundation pharmacists perceived the Medicines-Related Consultation Framework (MRCF) to be beneficial because they applied communicating with patients. On the other hand, a few foundation pharmacists did not find the MRCF useful because it was hard to implement in real-time during patient consultations. Instead, some reported using the MRCF to support reflection on practice.

"I think MRCFs are good because of good consultation skills and how they can really vary depending on your experience and how important communication is. And you can use it for telephone calls, which we were doing, face-to-face interactions, which we were doing and sometimes we'd do e-mails. So, there are multiple different ways of communication that could be assessed through the MRCFs". (Foundation pharmacist 4, hospital employed)

"I did complete two MRCFs, but they were done retrospectively for the supervised clinics that I had that were a few weeks before…they weren't very helpful because I kind of completed the MRCF myself. My GP supervisor told me to just complete the self-assessment and then we'll discuss it, but then we never actually got around to discussing it. So, I mean, I did reflect on what I thought I could improve on, but there wasn't really much feedback that my GP supervisor thought I should be improving on. So, it was just kind of a self-reflection exercise, which I can do anyway without a GP supervisor". (Foundation pharmacist 8, community pharmacy employed)

Those foundation pharmacists who used Case Based Discussions (CBDs) agreed that they were useful for reflective practice. Moreover, the Mini-Clinical Examination Exercise tool (Mini-CEX, also called a Pharmaceutical Care Assessment, PCA) was commonly mentioned alongside CBDs as a useful tool for reflecting on practice and identifying areas for improvement.

"I gained more from things like the PCAs and the CBDs, the Case Based Discussion cause I felt I could discuss the case with the patient, and then the GP or the pharmacist, so I did quite a few of them. And I did some feedback forms as well, and some reflective accounts. And for my training session as well, I got feedback from that, to see how I can improve in future training sessions…. I used a lot of them for the medication reviews that I did. So, I did quite a few of them, and I found them really useful, yeah. (Foundation pharmacist 2, hospital employed)

Support received by foundation pharmacists for the GP rotation

Overall, foundation pharmacists felt both their GP and pharmacist supervisors were very supportive of them throughout the GP placement. Foundation pharmacists described having face-to-face meetings with their GP supervisors at least once a week. While GP supervisors were not always physically present, they were contactable via email, phone, and other communication platforms. Foundation pharmacists interacted with their pharmacist supervisors more regularly as they worked alongside them. Moreover, if both their GP and pharmacist supervisors were busy foundation pharmacists sought advice from other healthcare professionals.

Training / placement resources

Most foundation pharmacists found *the SEL FP VTS Handbook* helpful at the beginning of the placement. They used handbook mainly to identify what evidence they needed to complete and develop their rotational plan However, most foundation pharmacists felt that overall the handbook was too lengthy/bulky.

"Yeah, I think it [handbook] was like a good guide to what we should aim to do, so yeah, I used that actually to make my monthly plan…my rotational plan, I based it on the handbook that they gave me". (Foundation pharmacist 2, hospital employed)

"They [handbook documents] were helpful once you highlighted the important bits. I think there's a lot of paperwork and already in this placement you're bombarded with admin and paperwork and things. So I think I can see that they tried to make it as concise as possible but I think it's just too much…sometimes you just need a literal bullet point, you need to do this, this and this, rather than having to filter through five pages of introduction and then getting to the main bit. So while the handbook is useful, I think it's useful if you know what you're looking for, whereas if you just receive the handbook as it is, it can be quite overwhelming and confusing". (Foundation pharmacist 3, hospital employed)

Foundation pharmacists thought that an individualised booklet from the placement site would help them to prepare them for their GP placements and the services they provided.

"Different GPs provide different services…So, actually identifying what the GP does specifically and, maybe, including that with the foundation pharmacist's tracker or booklet would be more individualised as well as…it would be something the foundation pharmacist would be able to achieve when they go to the GP practice in the guide as well". (Foundation pharmacist 5, community pharmacy employed)

Foundation pharmacists were critical of the number of portfolio entries that had to be submitted as part of the foundation programme **(Appendix 1)**. Whilst foundation pharmacists acknowledged the importance of having frameworks and assessments, they did not perceive much benefit from having

to document activities undertaken throughout the GP placement, particularly as the GP placement portfolio was not assessed.

> *"A lot of the frameworks, the activities and tasks that are mentioned… once you've done the placement for about four or five months, you're doing it constantly every day. But when you're being asked to show evidence and show proof that you've done it and that you're competent in this, it's very nit-picky, it's not useful, it doesn't add anything to the placement to physically write down. So while the frameworks are useful, I think the way in which we show that we're competent in these things probably needs to be a bit different…. it just created more paperwork, more admin, more unnecessary documentation, you know. So that's why towards the end I was kind of thinking…I was not doing a lot of GP objectives as a written piece because I just didn't have time and I just thought it's not going anywhere, it's not being submitted, I know I can do it, I don't need to…no one's asking me for it". (Foundation pharmacist 3, hospital employed)*

Outcomes of the GP placements

Overall, foundation pharmacists thought that this GP placement provided them with a good understanding of the pharmacist role in general practice and the opportunity to develop skills underpinning this role. All participants reported foundation pharmacists' consultation skills improved significantly as a result of GP placements. All participants further mentioned notable improvements in foundation pharmacists' ability to interact with patients and make decisions independently. They highlighted that whilst they had some prior experience of conducting medication reviews in community pharmacy, those at the GP placement were more structured and holistic.

> *"I learnt how to and what a good consultation looks like. So I was taught that skill quite early on when I was shadowing GPs and shadowing the lead GP, they taught me what to do, what a good consultation looks like. It differs again because before a face to face review was just simply talking the patient through the medication. But here, for me, the patient was there for their annual review, but I would go from the point of, does the diagnosis fit. So that was a new element to my skills in that consultation. And then obviously then going from that to, is the treatment effective… making the suggestions that were going to take effect, was something that I was now doing. When I was doing MUR, it was just a case of reviewing the medication, now I am doing that on top of doing the diagnostic thing and checking if the treatment is right and making amendments where needed". (Foundation pharmacist 1, community pharmacy employed)*

Similarly, pharmacist supervisors emphasised foundation pharmacists' learning how to holistically undertake patient consultations rather than focus solely on the medications aspect. GP supervisors felt that their foundation pharmacists' consultation skills developed from a mechanical/rigid approach when foundation pharmacists started the GP placement.

> *"That [consultation skills] improved very much… because in a GP practice, patients are coming directly to speak with you, and they're there only to talk to you and it's much more personal. And because of the setting, because it's in a GP's room, a patient will open up about so many things, and not always stick to one clinical problem. And it's all different ages, all different backgrounds, all different…anything can come up basically. So, her experience developed vastly over the time, over the rotation". (Supervisor 4, pharmacist)*

> *"The medicine [management] didn't take very long to get up to speed but it was the relating to people, making it [consultations] less scientific and more relevant to your patient that took a*

while… but I think we got there in the end. I think there is still more scope to go but that will happen with time and experience. But, definitely, a lot of improvement". (Supervisor 1, GP)

All foundation pharmacists believed their clinical skills developed considerably in the GP placement. Foundation pharmacists described learning clinical examination skills relevant to their scope of practice (e.g. blood pressure checks, blood tests, peak flow, and pulse oximetry). However, conflicting views of supervisors were found with some supervisors reporting *"much better"* or *"massively improved"* clinical skills, whereas others described these as *"slightly improved"* or "*a bit*". A lack of clarity on what foundation pharmacists should be able to do clinically was apparent. Supervisors at each GP placement site had their own ideas of what clinical roles foundation pharmacists should be able to perform regardless of when the GP placement took place in the SEL FP VTS **(Appendix 1).**

All participants perceived a foundation pharmacist's ability to work effectively with multidisciplinary teams improved, as working in general practice required them to engage with other healthcare professionals such as GPs, healthcare assistants, nurses, and physician associates. Supervisors also emphasised foundation pharmacists becoming more confident and proactive with contacting people within the wider healthcare system to ensure safe and effective transfer of medication.

"She was getting more confident, I think there was a bit of natural shyness at the beginning, but getting more confident with actually going directly to that clinician that was in charge of things or certainly being proactive with contacting people in secondary care, particularly with hospital transitions and discharges, yes, contacting and working with community pharmacists as well to ensure smooth transfer of medication". (Supervisor 10, GP)

"That's massively improved, because she's learnt that…although we may have nurses and GPs in practice and pharmacists, she's also learnt that she has to somehow tap into other expertise such as our community pharmacists, the CCGs, getting in touch with the hospitals and building that rapport with them in order to get the care that our patients need, making sure that we help them at the same time". (Supervisor 6, pharmacist)

Foundation pharmacists and supervisors agreed that foundation pharmacists' leadership skills (in terms of service delivery) did not improve much mainly due to the nature of the GP placement. Supervisors described that it was difficult for foundation pharmacists to develop/improve their leadership skills because they were in training and therefore were unable to take a lead on service delivery. On the other hand, supervisors felt foundation pharmacists were given the opportunity to demonstrate leadership traits through delivering education sessions for the GP staff and leading on audits. One supervisor reported a foundation pharmacist's leadership skills improved when responding to the pharmacist supervisor leaving their post.

"Leadership skills, I think it was too early. She [foundation pharmacist] was basically watching everyone, how things are done and participating in the meetings, but I don't think there were any leadership traits. So basically she wasn't… doing things herself, she would have to be told what exactly needs to be done". (Supervisor 5, GP tutor)

"I think she [foundation pharmacist] did develop in the sense that she proactively delivered education sessions and proactively led on some audits, I think she's naturally that kind of a person and we gave her an environment to develop that, so I don't want to say that this post gave her more leadership skills, but it gave her an opportunity to show them". (Supervisor 8, GP tutor)

Effects of Covid-19 on GP placement

Four of the GP placements were interrupted by the Covid-19 pandemic. Two foundation pharmacists had to leave the GP placement a month early (CEPIP placements), and the other two worked from home for the last 4-8 weeks of their GP placement (non-CEPIP placements). These foundation pharmacists believed the pandemic had halted their development because they were no longer able to provide patient-facing consultations. One of the CEPIP foundation pharmacists returned to their existing general practice to complete the remaining 4 weeks of GP placement. The other CEPIP foundation pharmacist completed their remaining CEPIP course through a non-VTS GP practice. However, the non-VTS GP practice was unable to accommodate completion of the GP placement educational objectives due to COVID-19 impact on service delivery. One of the foundation pharmacists who was working from home mentioned they were unable to meet some of their placement requirements **(Table 1)** because they were limited to doing administrative tasks and remote consultations due to changes in GP practice service delivery model.

> *"I think it would've been a bit nicer to have a longer period of time, especially because of the whole COVID situation as well. So, in terms of COVID, for the last month and a half, I was actually working from home and now I've got a limit as to what I could do… So, I was just working from home. I was doing remote consultations. I didn't really actually have any physical face-to-face conversations with any patients, but I was still looking at discharge letters, looking at the medication requests. So, still doing the, you could say, admin side of things, but I didn't really have much patient contact by that point. Because my clinics were hypertension clinics, so obviously it's quite hard to do that over the phone. You can't measure someone's blood pressure over the phone unless you ask them to do it themselves. (Foundation pharmacist 8, community pharmacy employed)*

There was a common agreement amongst supervisors whose placements were interrupted by COVID that this negatively impacted their foundation pharmacists' clinical skills as they spent less time at their GP site.

Benefits and drawbacks of foundation pharmacists undertaking GP placements

Overall, foundation pharmacists perceived that working in different settings provided them with insight into the patient journey across the primary / secondary care interface. Moreover, foundation pharmacists considered that GP placements consolidated learning from previous placements as it combined clinical aspects of hospital with the management aspects of community pharmacy.

> *"The main values would be understanding the patient's journey; being involved…so, when I say understanding the patient's journey, understanding community pharmacy and that's where we supply the medicine. Understanding secondary, and that might be where a specialist medicine is initiated. But actually, how does that go to the GP? What are the reviews? How is the patient followed up? What are the blood tests that need to be done? Just understanding that whole process was really valuable. Also, just understanding the developing role of a pharmacist; GP pharmacists are a new role and it is really inspiring to know that we can complete clinics and participate in clinics and really contribute towards patients' health in a GP setting…. and getting to know other healthcare professionals was, I think really important". (Foundation pharmacist 4, hospital employed)*

GP and pharmacist supervisors perceived that GP placements provided foundation pharmacists with a unique opportunity to learn about a range of complex patient issues in a supportive learning environment. GP supervisors alluded to the clinical experience foundation pharmacists gained from providing direct patient care and how this supported their understanding of the management of long-term conditions. Pharmacist supervisors suggested that GP placements allowed foundation pharmacists to take more responsibility for their learning and development (and more autonomy), which they thought differed from the highly structured training/working in hospitals. Overall, GP and pharmacist supervisors felt that GP placements produced a well-rounded pharmacist who was better-prepared to work in primary care, and indeed across sectors.

> *"I think for the foundation pharmacist, just getting a breadth of clinical experience. You're working autonomously, obviously with supervision but you're really understanding…I suppose you're working with patients in a different way to really address their needs. I guess you're dealing with complexity because polypharmacy is a big issue and perhaps in hospital, I suppose, they're just to check there's no interactions rather than address the polypharmacy in itself. I think you're just working in a much more functional way with various people. And I think you're really building up clinical knowledge…and I can't think of another environment where you can sit in and then see patients and then…you can discuss that with the nurse and then get feedback on what you can do next". (Supervisor 10, GP)*

> *"Obviously this is definitely the direction of travel [working in PCNs]. And I think one of the things that, them [foundation pharmacists] having the opportunity to have this placement is to see the differences between what it's like to work in a hospital setting versus what it's like to work in a community pharmacy versus a primary care setting. And also, the different skills that they pick up…I think primary care, because you're dealing with so many different aspects that it's quite fluid so, again, these are different skills that I think the pharmacists are able to pick up on, which they may not necessarily be able to have that level of exposure to when they are working in a very systemised manner…It's kind of like a different…almost of a jack of all trades in primary care because you're dealing on so many fronts with different aspects". (Supervisor 12, pharmacist)*

In terms of impact of the foundation pharmacist on the GP site, all participants felt that foundation pharmacists became a valuable asset to the general practice team as time went on. In the main, foundation pharmacists were perceived as less-experienced pharmacists who contributed to easing some of the medicines-related workload pressures at their GP sites. Foundation pharmacists commonly described helping ease GP workload by resolving medication queries; medication reconciliations/discharge letters and repeat prescriptions. Foundation pharmacists further described contributing to GP sites' Quality Outcomes Frameworks (QOFs) by carrying out audit work and doing medications reviews. In one site the foundation pharmacist provided a training session for the whole GP team on improving prescribing practice which led to a change at the practice. There were other examples of specific situations where foundation pharmacists helped their GP site. For instance, one of the foundation pharmacists covered at their GP site during the interim period when the main pharmacist left and another one was yet to be employed. Another foundation pharmacist helped deal with the rapid rise in medication queries from patients at the start of the covid-19 pandemic.

> *"I think as time went on, I was obviously a lot more useful because there were certain tasks that the GPs physically didn't have the time to actually complete. So, that's where I came in in terms of completing the medication reconciliation and discharge letters. And then also approving prescription requests as well. So, picking up these kind of medicine-related issues was a lot more convenient for them". (Foundation pharmacist 8 community pharmacy employed)*

"I think I definitely helped in different ways. So, with repeat prescriptions, for example, I also helped with that… Especially with the more complex ones that the prescribing clerk would normally do. I think even with the audit work, like the GP didn't have the time to do her prescribing improvements…but I did do a few of them. So, I think I took quite a big load off of their workload. Obviously, I was able to see patients and do their reviews, and that obviously helped with their QOF as well. I did provide a training session as well, which I think was really useful for the whole team, and to have that in one of the practice meetings. Because one of the prescribing improvements that I noticed, that there was like a lack of knowledge that the doctors had, so I provided a training session. I think they all found that really valuable. So, going forward now, they're supported in prescribing, so they have made like a permanent change there, which is nice". (Foundation pharmacist 2, hospital employed)

GP and pharmacist supervisors commonly stated that having a foundation pharmacist improved efficiencies and skill-mix. GP supervisors highlighted that having a foundation pharmacist meant that worked could be shared within the pharmacy team at the GP site. Moreover, having a foundation pharmacist often meant that the pharmacist(s) at the GP site could undertake more advanced clinical tasks. Although foundation pharmacists were supernumerary, pharmacist supervisors reported being able to reach clinical targets quicker by working alongside their foundation pharmacists. GP and pharmacist supervisors also highlighted that other GP staff benefited from having an extra clinician on-site available for medication related queries. On the whole, most GP supervisors intended to recruit a foundation pharmacist to work in the practice following the foundation programme. They valued having an extra member of staff who could help with medicines reviews, audits, working on the QOF, improving record keeping and liaising with the hospital and community pharmacists. Moreover, GP supervisors highlighted that their foundation pharmacists improved their own understanding of hospital and community pharmacy which in turn improved working relationships with these sectors.

"Benefits to the practice are huge. I mean it's having an extra member of staff at a difficult time. So having the pharmacist has been hugely beneficial to the practice, and loads of doctors find it really difficult to do proper medication reviews. So there's been loads of positive stuff, working on the QOF, on PINCER, improving records, liaising with the hospital, liaising with our chemists. So it's hugely beneficial". (Supervisor 2, GP)

"And in terms of the practice, they [GP staff] felt a huge benefit from her being there, because it meant so much more workload could actually be shared with the pharmacy team, we could take on a lot more. We were able to volunteer a lot more information and support. So, I think they found it hugely beneficial". (Supervisor 4, pharmacist)

However, GP supervisors acknowledged that supervising foundation pharmacists required time and resources to accommodate their needs. Whilst the requirements for supervising foundation pharmacists were perceived to be reasonable by all GP supervisors, they had reservations regarding the amount of time worth investing in training a foundation pharmacist since it was a one-off placement. One supervisor reported that the main challenge for them was deciding what was reasonable to delegate to their foundation pharmacist considering they were supernumerary and that another member of staff had to fill in that vacancy when the foundation pharmacist finished their rotation. Nonetheless, the general consensus amongst GP supervisors was that the benefits outweighed the cost considering their foundation pharmacists were driven and the GP site was rewarded financially for taking on the foundation pharmacist.

"Well, I think when someone comes in and then they are not replaced that makes it a bit difficult. So, it's a fine balance in actually giving someone independent practice work, so they are used to that and then, once they're gone, if there's not anyone coming afterwards there's a big gap that you kind of have to fill, working around to doing that work or taking it back. So, that is a slight…dilemma. Certainly, we have foundation doctors in four months, but they carry on rotating, so, you kind of have them continuously, so you can kind of build your service around them… I think, you know, had she [foundation pharmacist] not been that hard-working it may not have been worth it in terms of the time and effort you put in. That could be a bit tricky and difficult". (Supervisor 1, GP)

"Obviously it takes a bit of time and a bit of resource, but we were rewarded for that… If you said to me there was no incentive to take on the foundation pharmacist, I would say to you maybe it was a little bit difficult, but I can't complain if someone's paying me to do something... So I suppose the challenge was to try and manage her [foundation pharmacist] in a way that's slightly differently to how I would manage a newly employed junior pharmacist, I had to accommodate her because she's a trainee rather than an employed member of staff, so it means we had to do things slightly differently for her". (Supervisor 8, GP)

One GP supervisor felt that the net benefit to the practice site was negligible given the time and resources invested in training a foundation pharmacist for a short placement:

"I think initially there's the time consumed because you have to teach them everything. You feel, oh my God, inductions and this and that, the whole like you have to structure the whole thing. It's quite time consuming, I suppose, and then they are not there for long enough… so it takes them to get into the swing four to six weeks at the least and by the time they are, then given the hours they have to do with the clinicians, which is a bit of a barrier to those clinicians, sitting explaining, take them longer to deal with the patients kind of thing, which is quite a substantial amount of hours. I think the net benefit to the practice becomes very little, so people are reluctant in future". (Supervisor 5, GP)

Overall GP placement experience

Participants were asked to reflect on their overall GP placement experience at the end of interviews. None of the foundation pharmacists thought there were any negative consequences associated with undertaking GP placements as part of their training pathway. All foundation pharmacists perceived their GP placements to be an all-around positive experience and would consider working in general practice in the future.

All supervisors expressed their willingness to supervise foundation pharmacists again in the future. Some GP supervisors felt that supervising a foundation pharmacist was personally rewarding as it helped them improve their teaching skills and develop a better understanding of pharmacist roles in hospital/community pharmacy. Whereas other GP supervisors did not feel supervising a foundation pharmacist was a personally rewarding experience because they already had their own GP trainees. GP supervisors reported that these placements mostly helped them develop a better understanding of the teaching/educational requirements for foundation pharmacists and how those requirements differed from GP trainees.

"I don't think it was a new thing, I've trained a lot of people. I suppose it probably made me a little bit more aware of the slightly differing needs of a junior pharmacist based on a sample size of one, but compared to a GP trainees. So GP trainees generally probably a bit more confident,

probably a bit more robust and has slightly higher expectations of themselves, yeah. And they kind of know where they need to get to, they know what a GP looks like in terms of performance at the end of that, whereas with this scheme, the people coming into it don't really know what an effective practice pharmacist looks like. So…more guiding them through that journey and encouraging them to do things that they probably didn't think they would or should be doing. So that means a little bit more motivation but also explanation at the beginning about expectations really". (Supervisor 8, GP)

Pharmacist supervisors perceived that the time and effort required for supervising foundation pharmacists was worthwhile because they had the support of their practice and their foundation pharmacists helped them with their workload and contributed to service delivery towards the end. Pharmacist supervisors felt it helped when their foundation pharmacists had prior experience of working in hospital and community pharmacy. Moreover, pharmacist supervisors felt placement experience helped improve their own supervision and leadership skills.

"Initially, towards the beginning, obviously, I had to give a bit more time to training and mentoring my trainee. But as long as the GP surgery were quite supportive and understanding, that was fine. So, the GPs took on a little bit of my workload. So, you know, it was fine. Towards the end, obviously, she was helping with the workload, so it lessened my work towards the end of the rotation. So, it was absolutely fine". (Supervisor 9, pharmacist)

What supervisors thought made the GP placement successful?

All supervisors considered their GP placements to be successful. Supervisors emphasised that the success of GP placements relied heavily on what their foundation pharmacists brought to the role and how much work they were willing to put into the placement. Supervisors commonly described their foundation pharmacists as "hard-working", "enthusiastic", "resilient", "good communicator", "team player", "highly motivated", and "professional". One supervisor highlighted that their foundation pharmacist fitted very well in the practice and got along with the staff, which they perceived to be very important.

GP and pharmacist supervisors reported that having the time and capacity to supervise foundation pharmacists was necessary for the placement to be successful. Most GP supervisors perceived pharmacist supervisors to be vital to the success of the placement given that they were responsible for most of the day-to-day supervision. Moreover, GP supervisors discussed the importance of effective joint supervision with the pharmacist and sharing the same vision in terms of what they expected from the foundation pharmacist. In terms of extra-organisational support, supervisors felt the support from the training programme director strongly contributed to the success of the GP placement. Moreover, supervisors mentioned benefitting from initial meetings hosted by the training programme director, which brought supervisors from all of the GP sites together to discuss the programme and share ideas. A selection of quotes from some of interviewees on *"what made this GP placement experience successful"* are provided in **Box 1**.

Box 1: WHAT MADE THIS GP PLACEMENT EXPERIENCE SUCCESSFUL

"Well, I think that it was a success overall. So, I think that all these things were, if you've got the time and capacity and head space to do it, and, you know, money is no huge burden as it was funded. So, that's one thing. Two, she [foundation pharmacist] was hard working and a team player, got on with things and certainly she got stuck in, that certainly made a big difference. And [she] was willing to take because I think some people, when they get to a certain age being told you can't, you need to improve this, that and the other, that can be difficult, but she was very willing to do that. So, I think that made it quite a big success". (Supervisor 1, GP)

"I'm going to say the individual [foundation pharmacist] first, because they're working in a completely different ballgame, so somewhat have to be thick-skinned and resilient because it's not like working anywhere else, especially because a lot of the work is quite…you do it by yourself, whereas in community pharmacy and hospital you have a team behind you to work with. And I guess the other part that makes it successful is who your supervisors are. If you have a good pharmacist or have a good GP to work with, because if you don't you're not going to get as much out of it as you'd expect to as a trainee". (Supervisor 6, pharmacist)

"I think personally, she [foundation pharmacist] fitted in very well in the practice. She was very kind, she was a very good communicator and that was very, very important. Teaching and training is difficult when you have someone who doesn't really fit in. And I suppose it was very helpful as well, [clinical pharmacist] was brilliant. She was amazing, she was a very nice person, a very good person to work with, and what I lacked, she made up. We had good support from [training programme director] as well, who's very kind. So I was very pleased to take part in all…in the teaching and the training". (Supervisor 2, GP)

"I mean, I think it was successful, definitely, I think her [foundation pharmacist] own feedback was that she enjoyed it a lot. I think our infrastructure, we had an infrastructure to be able to manage the process and her. So there were different layers, there was myself, but actually critically there was [clinical pharmacist], the one who did most of the hand-holding if you like through the rotation, and I think it would have been difficult…I couldn't have done this without support from the lead pharmacist basically, so I think that was important. I also think integrating her [foundation pharmacist] into our current ways of working, our current education programmes, clinical meetings, also contributed to the success, because she effectively assimilated that sort of friendly care atmosphere and looked at colleagues, pharmacist colleagues and thought there was some role modelling that she could do in terms of what others do, so that was powerful". (Supervisor 8, GP)

Ways to improve the programme moving forward

More specific guidance around the aims/expectations of the placement:

Moving forward, most supervisors thought more specific guidance for future foundation pharmacists and supervisors around the aims/expectations of the placement was needed. This would ensure similar training experience. More information on timetabling for GP placements was required (i.e. time allocation for induction and other activities). One of the GP supervisors strongly suggested that

training programme directors needed to be more ambitious about their expectations of foundation pharmacists to ensure that the placement experience was successful for both the foundation pharmacists and host site.

> *"I think the leaders of the programme… need to be quite directive of the standards that are expected and the things that the pharmacist could and should be able to do. So rather than err on the side of less, they should err on the side of more, because the GPs look for guidance, if you leave it to the GPs, you'll get huge variation. Now, I'm involved enough in my own organisation to make sure that the outcome is a successful one for us and for the clinician, but in another practice… I'm sure …there'll be a wildly different experience. And if the leaders of the programme are clear about what is required and how it should happen, with some flexibility, I think that would improve things moving forward. So be ambitious, be more ambitious rather than less". (Supervisor 8, GP)*

Similarly, all of the foundation pharmacists made suggestions related to the expectations of the GP rotation. Whilst the learning objectives and numbers of evidences required were stated in the placement handbook, some foundation pharmacists wanted more clarity on the purpose of the learning objectives and what they were expected to achieve by the end of the GP placement. Other foundation pharmacists suggested that GP supervisors should be more aware of the requirements/educational objectives **(See Table 1)** rather than relying on foundation pharmacists to guide them.

> *"I think the only thing is mainly from the Health Education England point of view, kind of what they wanted in terms of learning outcomes; and I think they need to decide on what they want and what are the portfolios actually going to be used for, or is it going to be assessed". (Foundation pharmacist 6, hospital employed)*

> *"So, it just kind of makes me feel like everything is pointless when they [GP supervisor] don't really know what the kind of programme entails. So, even if they have a copy of the educational objective and there's a way to make sure that they actually have maybe the training day or to make sure they've read the booklet. Because I think it probably was sent to them, but I don't think...my supervisor had no idea what I was supposed to be doing. There was no chasing up, there was nothing in terms of educational objectives. He just kind of just left me to it". (Foundation pharmacist 8, community pharmacy employed)*

Contingency plans, clear communication processes and supervision roles prior to start of GP placements:

Two foundation pharmacists discussed the impact of their pharmacist supervisors leaving around 2 months into the GP placement. They both initially benefited from having pharmacist supervisors for direct support and as a point of contact for advice. In absence of pharmacist supervisors, trainees felt they worked more independently and relied on other staff for support/advice. However, foundation pharmacists valued having a pharmacist supervisor to ease their transition into GP sector and support them on the day-to-day.

> *"Well, actually what happened with mine, is that he left [pharmacist supervisor]… And there was a bit of a gap… I was shadowing him a lot, and he was really, really helpful actually, because he'd been doing that role for a while. But, when he left and there was a gap, I just used the GP supervisor, and another GP when I needed them, and then another pharmacist came. But, I think they had a lot of workload, so it was difficult, to be honest". (Foundation pharmacist 2, hospital employed)*

One foundation pharmacist had a split placement across two organisations within a GP Federation, where the pharmacist supervisors mainly served as an off-site point of contact for any clinical/general enquiries regarding the GP rotation. However, the foundation pharmacist involved in this shared placement perceived that it was difficult to communicate effectively with their off-site pharmacist supervisors and would have preferred input from an on-site pharmacist. Similar challenges with communication were also flagged by pharmacist supervisors for this placement, who suggested that for similar shared placement models, a local agreed plan on communication processes and supervision roles between GP and pharmacist supervisors prior to start of placement would help to improve this issue.

> *"I think it would've been nice to have more pharmacist input. So, more pharmacist supervision or just having a pharmacist onsite…. Yes, I would say because the role of a GP and the role of a pharmacist is obviously very different. And whilst it was helpful to have GP input... I think because a pharmacist obviously knows what you are capable of, what you can do, what you can't do. In just simple things like completing medication reviews, a GP will do it so differently to a pharmacist. So, it would've been a lot more helpful to have a pharmacist onsite". (Foundation pharmacist 8, community pharmacy employed)*

Upscaling of foundation pharmacist GP placements:

Some pharmacist supervisors also discussed the need to provide more opportunities for future foundation pharmacists to take part in GP placements given that this was *"the direction of travel"*. They suggested expanding this programme nationwide and engaging with PCNs to supervise foundation pharmacists in the future.

> *"I think we need to be thinking about how we develop the primary care network workforce. So the changing language needs to change and I think you need to think how do you engage with the primary care network to supervise these kinds of roles in the future. I think you need to be able to do this across a wider geography, be able to get the most from the programme, from the education programme for the individuals, and a pharmacist to support it. A GP practice is quite limited and of course it would enable you to work in primary care. So I just think the programme, if it is to continue, needs to adapt to use that language rather than general practice". (Supervisor 13, pharmacist)*

Advice to future cohorts of foundation pharmacist foundation pharmacists in general practice

To round off the interviews with foundation pharmacists in this study, they were asked to provide advice to future foundation pharmacist foundation pharmacists undertaking this type of GP placement **(Box 2)**. Foundation pharmacists mainly advised future cohorts to be proactive and establish their roles early in the placement. Moreover, foundation pharmacists recommended future foundation pharmacists to seek out more patient-facing opportunities and engage with some of the clinically challenging issues at the GP site. Lastly, foundation pharmacists highlighted the importance of knowing the roles of both clinical and non-clinical staff at the GP site and to ensure that supervisors understood how to use the work-based assessments.

BOX 2: ADVICE GIVEN TO FUTURE FOUNDATION PHARMACISTS UNDERTAKING GP PLACEMENTS

"Ask questions, constantly ask questions and get to know the roles of the different team members in a GP practice because clinical and non-clinical staff are very, very useful and very crucial. And I think a lot of your questions will end up going to them, so knowing the different roles of everybody and how they work, and enjoying it, I really enjoyed GP". (Foundation pharmacist 3, hospital employed)

"Try to be open-minded; be prepared to learn a lot and ask questions and get involved and seek out opportunities and I think you need to have a clear identity as to what you are as a profession and what you are happy to do and what you are not happy to do, and…yeah, read through all the paperwork that was supplied to you. Make sure you understand it. If they are doing something like we are doing and they are going to have that work-based assessment, make sure that they understand when different work-based assessments are appropriate because you only have a limited amount of time with your supervisor. So, if you are going to ask them to come and do a work-based assessment with you, that you do actually have the right one and you know what it is that is being assessed. Yeah, so being prepared is the most important. (Foundation pharmacist 4, hospital employed)

"I think it would be definitely go ahead and do it, but I think also you have to be willing to learn as well. So it's kind of it's outside of your comfort zone maybe as a pharmacist because it's not something we normally do, and it's kind of slightly still novel, and we don't do that for pre-reg at the moment so much, and normally it's very still community. Whereas GP I think is like a really good place to learn. So I think you have to be willing to learn as well, so physical assessments and stuff, that's not normally what pharmacists, but I guess they're good skills to have. And it helps with that patient communication as well". (Foundation pharmacist 6, hospital employed)

"I would say just make sure you are being proactive in terms of educational requirements. So, know what you want out of the placement, which is probably something that I didn't really think too much about. So, I feel I just went into the placement and just took things as they came. But I think the biggest piece of advice I would give is to definitely think about what you want from the placement and make sure you kind of push to get that as well". (Foundation pharmacist 8, community pharmacy employed)

Discussion

This research was designed to identify foundation pharmacists' and supervisors' views on the implementation of general practice rotations for foundation pharmacists who took part in the SEL FP VTS. All foundation pharmacists involved in the SEL FP VTS took part in the study (n=8). Of the 15 supervisors approached, 13 consented to take part in the study.

GP placements offering a structured induction programme; organised educational arrangements; interprofessional and multidisciplinary learning; effective joint-supervision along with a supervision

model which supports foundation pharmacists' transition to the role in general practice, all contributed to a successful vocational foundation GP placement. A lack of these impacted negatively.

Initially, foundation pharmacists were mainly involved in administrative work and then progressed to shadowing pharmacists and other healthcare professionals in clinics before eventually running their own clinics. The ability of foundation pharmacists to apply what they learn in practice was supported by a supervision model of legitimate peripheral participation[9] [10] which allowed for gradual development of competence. Initially, foundation pharmacists needed direct supervision in all/most of the activities. Over time, foundation pharmacists were given more responsibilities by their supervisors as they became more confident and competent and then towards the end of the placement worked independently, seeking consultation when appropriate. Foundation pharmacists' benefited from having both GP supervisors providing formal and pharmacist supervisors for more informal learning.

In terms of time required for foundation pharmacists to learn the GP role and deliver services at the GP sites, this study suggests that six months is the minimum duration to allow foundation pharmacists to settle in and contribute to clinical practice. Longer placements (6-9 months) were viewed as preferable to enable foundation pharmacists to further build on their skills and become more autonomous in delivering services. Given that foundation pharmacists need considerable time to learn and develop to provide services autonomously, having a continuous rotation of foundation pharmacists (similar to GP trainees) to backfill the role of departing foundation pharmacists may be favourable for GP sites.

In terms of timing of the GP placement in relation to the overall 3-year foundation training pathway, some knowledge and experience in hospital and community pharmacy was perceived necessary by foundation pharmacists to develop skills and gain confidence before going into general practice. The potential for integrating multiple GP block placements throughout learning pathways for foundation pharmacists may be worth exploring/investigating as some suggested having two GP rotations; one early in the foundation training programme and another one towards the end to consolidate learning. Whilst independent prescribing was not the focus of this evaluation, we were able to draw out that foundation pharmacists whose GP placements overlapped with the CEPIP towards the end of year 3 found it challenging to do both in 3.5 months of the GP placement.

The main benefits of the GP placements for foundation pharmacists were seen as providing a good overview of the patient journey between primary and secondary care; ability to work effectively with multidisciplinary teams; and consolidation of learning especially consultation/communication skills. Foundation pharmacists contributed to easing some of the medicines-related workload pressures at their GP sites by resolving medication queries; medication reconciliations/discharge letters and repeat prescriptions. Foundation pharmacists also improved efficiencies and skill-mix as more workload was shared with the pharmacy team at the GP site.

Consistent with findings from an earlier study looking at skill-mix change in general practice,[13] participants in this study lacked an understanding of the role/scope of practice for GP based pharmacists and knew even less about roles of foundation pharmacists. GP supervisors had limited experience of supervising foundation pharmacists and each had their own ideas of what roles foundation pharmacists should be able to perform. This could be explained by the pharmacy profession's limited exposure to general practice both in terms of the MPharm curriculum, pre-

registration and post-qualification training for pharmacists. Thus, having an on-site pharmacist tutor at each GP site helped bridge the understanding of pharmacist role, and to also outline what foundation pharmacists can/cannot do in general practice.

In terms of training/learning resources, the SEL FP VTS Handbook was helpful as a reference resource but could have been briefer and supplemented by training resources more specific to the placement sites. Supervisors benefited from support received by the programme director and initial meetings set-up by the training programme director which brought supervisors from all of the GP sites together to discuss the programme and share ideas. Even so, supervisors wanted more explicit guidance related to the competency level expected of foundation pharmacists to ensure consistency in training experience. There was a lack of clarity on how competencies and intended learning outcomes are best assessed/demonstrated – and how assessments, feedback, portfolios helped support this.

Consistent with the medical literature, learning from workplace-based assessments (WBAs) were inextricably linked to the amount of engagement from healthcare professionals at the GP site.[14] WBAs were beneficial when used to promote active, learner-centred learning, accompanied by feedback from supervisors/healthcare professionals. Also consistent with the medical literature,[11 12] case-based learning via MDT meetings was a valuable pedagogical method for interprofessional learning and helped reinforce foundation pharmacists approaches to patient consultations.

Upon reflection, all foundation pharmacists enjoyed their placement experience and mentioned that they would consider working in general practice at some point in the future. All supervisors were willing to supervise foundation pharmacists again in the future. As with this SEL FP VTS, 'targeting' training GP sites along with appropriate support and resources by HEE may be seen as a viable way of exposing foundation pharmacists to general practice, and of encouraging them to consider pharmacist roles in general practice as a career option. Reimbursing GP sites for time and resources allocated to educate and train foundation pharmacists was important. In absence of remuneration, there may be little or no incentives for GP sites to recruit newly qualified pharmacists over GP trainees or already experienced pharmacists. An alternative model may be having a continuous stream of foundation pharmacists, similar to junior doctor rotations.

Limitations of the study:

It is important to note that this is a qualitative study which provides useful insights for future foundation pharmacist GP placements; however, findings are not intended to be generalisable. Moreover, the study design did not include feedback from SEL FP VTS educational supervisors, who supervised the foundation pharmacists during GP placements, or from training programme director.

Recommendations for policy and practice

The SEL FP VTS was a three-year multi-sector foundation pharmacist programme that integrated community, hospital, NHS LPP and GP practice placements; it also incorporated independent prescribing training. This study looked specifically at the GP practice placements where foundation pharmacists spent 6 months over the period of July 2019 to September 2020. Below, we draw out insights gained from this study to inform future general practice placements for foundation pharmacists:

- GP placements for foundation pharmacists should be structured to support development, initially focusing on induction and learning administrative tasks to understand how the GP site works, followed by performing basic medication reviews/clinical assessments to undertaking more complex reviews.

- This will require a supervision model where foundation pharmacists start by shadowing and observing, followed by incremental increases in autonomous working. In parallel, supervision should be initially direct and then over time become more arms-length as foundation pharmacists move toward more competence, self-reliance, and ability to work autonomously.

- Given that the role of foundation pharmacists in general practice is not well-established, HEE guidance around competency levels/expectations for foundation pharmacists will be important to ensure consistency in general practice placements particularly to upscale GP placements on a national level. There is a need for more clarity on competencies and intended learning outcomes – as well as how outcomes/achievement are assessed and what should be done to achieve them.

- There should be an agreed plan for communication processes and supervision roles at local practice level prior to start of placement between GP and pharmacist supervisors to ensure foundation pharmacists receive optimal benefit from both supervisors.

- Foundation pharmacists benefit from a blended approach to learning and clinical supervision support, where they have protected time with their GP supervisors to discuss learning needs (formal educational based learning), whilst also have access to their pharmacist supervisor for their day-to-day learning (informal learning).

- The benefits of workplace-based assessments (WBAs) are optimised when used to promote active, learner-centred learning, accompanied by feedback from supervisors/healthcare professionals. Moreover, interdisciplinary learning activities in GP placements such as case-based learning are very beneficial to foundation pharmacists learning and development.

- Targeting training GP sites along with appropriate training grants and support by training programme director(s) will be important factors for developing sustainable GP placements. Placements are likely to be more challenging if practices are not GP training sites.

- It will be important to consider the amount of time needed for foundation pharmacists to learn the GP role and deliver services at the GP sites as well as the possibility of having a continuous rotation of foundation pharmacists, to backfill departing foundation pharmacists and ensure continuity of service. Six months appeared to be the minimum duration required for the GP placement to allow a foundation pharmacist to settle in and learn to play an active role that would contribute to GP service delivery.

- HEE resources and support will also be important to providing sustainable GP placements. The SEL FP VTS Handbook is a useful reference for supervisors and foundation pharmacists

and could be supplemented by training resources specific to the placement site. Moreover, supervisors value initial meetings, which bring supervisors from all of the GP sites together to discuss the programme and share ideas.

References

1. NHS. NHS FIVE YEAR FORWARD VIEW 2014 [Available from: https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf.

2. NHS. The NHS Long Term Plan 2019 [Available from: https://www.longtermplan.nhs.uk/wp-content/uploads/2019/01/nhs-long-term-plan-june-2019.pdf.

3. Jones CEL, McEwen-Smith L, Fidler L, et al. Use of cross-sector apprenticeships in pharmacy: is it a sustainable quality education model for pharmacy assistants? *The International journal of pharmacy practice* 2019;27(2):201-06. doi: 10.1111/ijpp.12468

4. Jee SD, Schafheutle EI, Noyce PR. Exploring the process of professional socialisation and development during pharmacy pre-registration training in England. *The International journal of pharmacy practice* 2016;24(4):283-93. doi: 10.1111/ijpp.12250

5. Schafheutle EI, Jee SD, Willis SC. Fitness for purpose of pharmacy technician education and training: The case of Great Britain. *Research in social & administrative pharmacy : RSAP* 2017;13(1):88-97. doi: 10.1016/j.sapharm.2015.12.011

6. Jee SD, Schafheutle EI, Noyce PR. Using longitudinal mixed methods to study the development of professional behaviours during pharmacy work-based training. *Health & Social Care in the Community* 2017;25(3):975-86. doi: 10.1111/hsc.12397

7. Jee SD, Schafheutle EI, Noyce PR. Is pharmacist pre-registration training equitable and robust? *Higher Education, Skills and Work-Based Learning* 2019;9(3):347-58. doi: 10.1108/HESWBL-07-2018-0071

8. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative research in psychology* 2006;3(2):77-101.

9. Merritt C, Shah B, Santen S. Apprenticeship to Entrustment: A Model for Clinical Education. *Academic Medicine* 2017;92(11):1646. doi: 10.1097/acm.0000000000001836

10. Lave J, Wenger E. Situated learning: Legitimate peripheral participation. New York, NY, US: Cambridge University Press 1991.

11. Thistlethwaite J. Interprofessional education: a review of context, learning and the research agenda. *Medical Education* 2012;46(1):58-70. doi: https://doi.org/10.1111/j.1365-2923.2011.04143.x

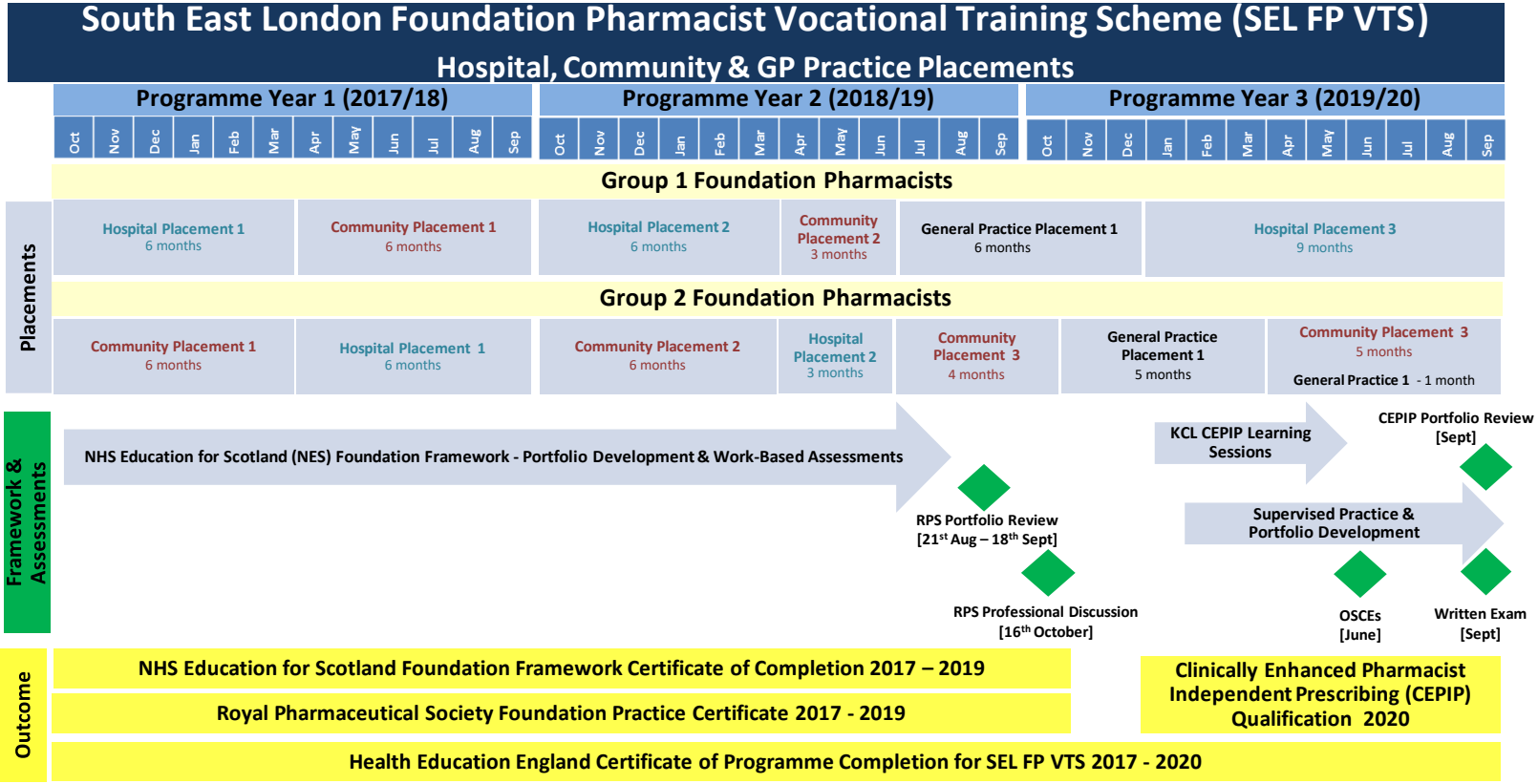
12. Gooding HC, Ziniel S, Touloumtzis C, et al. Case-Based Teaching for Interprofessional Postgraduate Trainees in Adolescent Health. *J Adolesc Health* 2016;58(5):567-72. doi: 10.1016/j.jadohealth.2016.01.011 [published Online First: 2016/04/25]

13. Nelson PA, Bradley F, Martindale AM, et al. Skill-mix change in general practice: a qualitative comparison of three 'new' non-medical roles in English primary care. *Br J Gen Pract* 2019;69(684):e489-e98. doi: 10.3399/bjgp19X704117 [published Online First: 2019/06/05]

14. Preston R, Gratani M, Owens K, et al. Exploring the Impact of Assessment on Medical Students' Learning. *Assessment & Evaluation in Higher Education* 2020;45(1):109-24. doi: 10.1080/02602938.2019.1614145

15. Donovan G, Brown A, Von Hatten E, et al. Introducing pharmacy students to the structure and function of general practice through undergraduate placements. *Currents in Pharmacy Teaching and Learning* 2019;11(10):1055-64. doi: https://doi.org/10.1016/j.cptl.2019.06.013

Appendix 1: Summary of SEL FP VTS Programme Plan 2017-2020



Group 1 – Hospital Employed. Group 2 - Community Employed. Note: CEPIP for Group 2 community employed foundation pharmacists will integrate general practice and community placement elements. GP Placements will support completion of practice hours and GPs will act as DMP.

Appendix 2: Workplace-based assessments*

Workplace-based assessment	Definition
MRCF: Medicines-Related Consultation Framework	The MRCF is a structured validated patient – centred approach to patient consultation. It supports foundation pharmacists in developing consultation skills. This tool gives the opportunity for the supervisor to assess if the foundation pharmacist is an effective communicator and able to shape the patient's behaviour, through a shared agenda to ensure medicines optimisation.
Mini-CEX (PCA): Mini-Clinical Examination Exercise, RPS Pharmaceutical Care Assessment	A Mini-CEX is used to assess the foundation pharmacist's ability to identify, action and resolve issues effectively when providing pharmaceutical care for a patient. This enables supervisors to review various skills, attitudes, knowledge and behaviours of the foundation pharmacist, and is a useful tool for developing pharmacy staff. It can be adapted for use in many scenarios, such as undertaking a medicines reconciliation, taking in and resolving an issue with a request for a medication (e.g. out of stock or contraindicated medications) and medicines use reviews.
CBD: Case Based Discussion	In a CBD the foundation pharmacist discusses management and understanding of a case with a supervisor. Within the discussion supervisors are able to probe a foundation pharmacist's knowledge and approach to dealing with the case. An example of a case base discussion will include an interaction and intervention with patient with a chronic illness such as diabetes
DOPS: Direct Observation of Practice Skills	A DOP assesses the foundation pharmacist's ability to carry out practical activities. Examples of suitable activities to use a DOPS for are influenza vaccination administration, monitoring of blood pressure or other physical assessment, completing a DATEX incident report or taking in a medicines information enquiry.

**Definitions taken from the SEL FP VTS Foundation Pharmacist in General Practice Rotation Handbook*