An Evaluation of the Multi-Sector Pre-Registration Pharmacy Programme in Wales (2020/21)

Final Report

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Executive Summary

Background

A multi-sector pre-registration programme was first piloted in Wales in 2016. Various models have since been tried and evaluated. Results have demonstrated that pharmacists pursuing multi-sector training value their experience, gain a more holistic perspective of pharmacy and the patient journey, and would choose this option again. Disadvantages relate to the more limited time and experience in each sector.

Aims

The aims of this study were to evaluate the feasibility of the newly developed multi-sector training programme curriculum and identify the suitability of two implemented models. In one model trainees complete 2-month block rotations in the three sectors during the first six-months of their training and then revisit each sector for a second 2-month rotation in the second half of the year (the 2(3x2-month) model, North Wales). In the other model, trainees complete 4-month block rotations in the three sectors in sequence (the 3x4-month model, South Wales).

The specific objectives were fourfold:

1. To seek the views of trainees on both models, and their educational supervisors, on the feasibility of achieving the curriculum outcomes
2. To seek the views of trainees and educational supervisors on how well the curriculum prepares trainees for practice (i.e. is the curriculum fit for purpose?)
3. To seek the views of educational and training leads on objectives 1 and 2
4. To compare findings of the two models, identifying the strengths and limitations of each and whether one better facilitates the achievement of the intended outcomes.

Methods

Data collection was carried in two phases:

Phase 1: Focus groups/interviews with trainees and educational supervisors in the multi-sector programmes approximately midway through training.

Phase 2: Focus groups/interviews with trainees and educational supervisors on the multi-sector programme and a focus group with E&T Leads. All conducted towards the end of the programme.

Summary of Participants across Phase 1 and 2 according to Role and Region

Participant	Phase 1: Midpoint		Phase 2: Endpoint	
	North Wales	South Wales	North Wales	South Wales
Trainees	8	6	3	2
Hospital Supervisors	3	1	1	0
Primary Care Supervisors*	3	3	3	2
Community Supervisors	4	0	3	0
Education and Training Leads	-	-	3	2
Total	18	10	13	6

*includes supervisors in medicines management.

All data were collected remotely via Microsoft Teams or telephone. All focus groups and interviews were audio recorded, transcribed and transferred into NVivo software for pattern coding and thematic analysis.

Across both phases of the study, we conducted a total of eight focus groups and 20 telephone interviews. These ranged in duration from 15 to 56 minutes and accumulated to 14 hours and 28 minutes of conversation data in total.

Summary and Conclusions

Key Findings Mapped against the Evaluation Objectives

The feasibility of achieving the curriculum outcomes

- All participant groups generally felt there were too many learning outcomes, particularly in the primary care sector, as well as duplication with the trainee workbook

- Quantity of outcomes meant trainees were often more focused on ticking boxes than immersing themselves in the multi-sector training experience

- Some learning outcomes were perceived to be too sector-specific – there was a desire for greater flexibility in how and where outcomes were demonstrated

- Characteristics of the trainee are important – to thrive in the programme they need to be capable, adaptable, organised, and pro-active to match the fast pace and high intensity of the programme

- The pandemic influenced what services were running and sometimes limited trainees' exposure to particular opportunities for evidence collection. It also impacted the extent to which supervisors could prepare for the programme

The extent the multi-sector training programme prepares trainees for practice

- Participants held mixed views on how prepared trainees were to enter practice upon completion of their multi-sector training

- The need to integrate into multiple teams throughout the year helped trainees to develop into adaptable, versatile pharmacists

- Some trainees felt less prepared for clinical and safety aspects often citing the hospital setting, in particular. Previous longitudinal evaluation suggests these are common concerns but not longstanding

- Participants recognised that trainees would need support early on in their posts as registered pharmacists

- Supervisors and E&T leads also felt the preparedness of trainees would depend on the individual

- Results are somewhat limited by the time of data collection, however they are supplemented by our previous evaluation of multi-sector training and longitudinal follow-up

Views of education and training leads

- E&T leads felt the results were not surprising and generally agreed with views of trainees and supervisors. They also highlighted impact of trainee characteristics and importance of having a wider support network

- E&T leads provided additional context to challenges of the year (e.g. the pandemic, readiness of supervisors and support staff, wider landscape of primary care setting)

- They thought that the year had been a useful learning experience and placed them in good stead for the following year and the future

- The imbalance between the increased intensity and burden on training sites and supervisors but reduced return on investment was noted

- Concerns were expressed that the pandemic had skewed the programme and the evaluation and thus could inhibit an accurate reflection of the programme.

Comparison of two models

The 2(3x2-month) Model:
- Provides trainees with exposure to all three sectors before applying for jobs
- Provides opportunity to return to sectors and apply new learning and experiences. However, there is increased pressure when returning to sectors to complete outstanding learning outcomes
- The intensity and fast pace of training builds resilience and softer skills but can also create difficulties for trainees already feeling overwhelmed

The 3x4-month Model:
- Allows immersion within each sector, gain competence and sign-off at the end of each rotation, however not returning to sectors means new learning from elsewhere cannot be applied
- Provides better opportunities to build relationships with the wider team and benefits the workplace logistically
- It is difficult to ascertain a suitable order of sector rotations and can potentially leave a big gap between training in a sector and working in that sector

Background

In 2016, a multi-sector pre-registration programme was introduced and piloted in some Health Boards. This programme sees trainees spend time in hospital, community and primary care settings throughout the training year. This is in contrast to the traditional, single-sector programmes.

Since its introduction, various models of the multi-sector programme have been piloted and evaluated. Results from the evaluations have demonstrated that pharmacists pursuing multi-sector training value their experience and would choose this option again. Advantages of the programme lie in its provision of a holistic perspective on pharmacy, transfer of care across settings and insights into the patient journey. Disadvantages were also reported, generally relating to splitting time across settings which limits the amount of time and experience in each sector.

What has remained uncertain from previous evaluation findings is how the programme is best structured. That is, how trainees' time should be divided between the three pharmacy sectors. Given that the multi-sector programme will become compulsory in Wales and single-sector training will be phased out, Health Education and Improvement Wales (HEIW) are exploring the feasibility of moving to a single model of the multi-sector programme with a defined curriculum. As such, a new curriculum was developed for the 2020/21 academic year, and two University Health Boards (UHBs) were recruited to trial this curriculum but following two distinct models:

- 2(3x2-month) model: in a North Wales UHB, trainees complete 2-month block rotations in the three sectors during the first six-months of their training and then revisit each sector for a second 2-month rotation in the second half of the year.

- 3x4-month model: in a South Wales UHB, trainees complete 4-month block rotations in the three sectors in sequence.

Aim

The principal dual aim of this study was to evaluate the feasibility of the newly developed multi-sector training programme curriculum and identify the suitability of the two implemented models.

The specific objectives were fourfold:

5. To seek the views of trainees on both models, and their educational supervisors, on the feasibility of achieving the curriculum outcomes
6. To seek the views of trainees and educational supervisors on how well the curriculum prepares trainees for practice (i.e. is the curriculum fit for purpose?)
7. To seek the views of educational and training leads on objectives 1 and 2
8. To compare findings of the two models, identifying the strengths and limitations of each and whether one better facilitates the achievement of the intended outcomes.

Method

To address the evaluation objectives, a qualitative study was employed. This involved data collection through focus group and interview discussions with various stakeholders with interest in the multi-sector training programme.

Participants involved three distinct participant groups: multi-sector pre-registration trainees (referred to herein as trainees), educational supervisors and education and training leads (E&T leads). These participants are further subcategorised into regions (and thus multi-sector model). Data collection was carried out in two phases:

> Phase 1: Focus groups/interviews with trainees and educational supervisors in the multi-sector programmes approximately midway through training

> Phase 2: Focus groups/interviews with trainees and educational supervisors on the multi-sector programme and a focus group with E&T Leads. All conducted towards the end of the programme.

In Phase 1, focus groups were held as part of pre-arranged remote study day events. However, there were instances where trainees and supervisors were unable to attend these events and so were instead offered the opportunity to participate in a one-to-one interview. At this stage, trainees in North Wales (2(3x2-month) model) had completed one rotation in each of the three sectors and trainees in South Wales had completed approximately one and a half rotations (sectors).

Preliminary analysis in Phase 1 guided the development of the question schedules that were implemented in Phase 2.

In Phase 2 there were no pre-arranged study day events for trainees or supervisors, so several dates and times were selected and offered to potential participants as focus groups. Where participants could not attend these dates, they were offered a one-to-one interview at a date and time suitable for them. In Phase 2, data was collected from trainees and supervisors between July and August 2021, thus on some occasions, trainees had already sat their registration exam.

In the case of engaging with E&T leads, this was intended to run after data collection from trainees and supervisors was complete. E&T leads were invited to a feedback and discussion event. Here, the research team presented the preliminary findings from trainee and supervisor feedback and then invited the leads to provide commentary in a focus group discussion. This event took place in November 2021 when the new multi-sector cohort (2021/22) had started the programme. The data collection timeline is summarised in Table 1.

Due to the ongoing pandemic and subsequent social distancing regulations that remained in place through the duration of data collection, all data were collected remotely via Microsoft Teams or telephone. All focus groups and interviews were audio recorded, transcribed and transferred into NVivo software for pattern coding and thematic analysis.

Table 1 – Summary of Data Collection and Timepoints

	Phase 1	Phase 2
Timepoint	Approx. midway through training programme	Approx. end of programme
Method	Virtual focus groups One-to-one interviews	Virtual focus groups One-to-one interviews
Participants	Trainees Educational Supervisors	Trainees Educational Supervisors Education and Training Leads

In the previous Interim Report submitted in February 2021, we reported solely on Phase 1 of data collection which primarily explored objectives 1 and 4. Given the detail provided in the Interim Report and the large amount of new data collected in Phase 2, we do not intend for this Final Report to override the Interim, nor repeat what has been previously reported. Instead, this Final Report builds on the Interim findings and addresses the outstanding evaluation objectives.

Results

Across both phases of the study, we conducted a total of eight focus groups and 20 telephone interviews. These ranged in duration from 15 to 56 minutes and accumulated to 14 hours and 28 minutes of conversation data in total.

In Phase 1, we had high engagement from participants and spoke with 14 trainees and 14 supervisors. In Phase 2, engagement was more difficult, and we were successful in speaking with five trainees, nine supervisors and five E&T leads. Table 2 provides a detailed breakdown of participants both by role and by region. Here it is evident that the only participant group we were unable to gain a voice from was community supervisors in South Wales, also all of the South Wales Primary Care supervisors we engaged with in Phase 2 were based in the Medicines Management Team.

Table 2 – Summary of Participants across Phase 1 and 2 according to Role and Region

Participant	Phase 1: Midpoint		Phase 2: Endpoint	
	North Wales	South Wales	North Wales	South Wales
Trainees	8	6	3	2
Hospital Supervisors	3	1	1	0
Primary Care Supervisors*	3	3	3	2
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The following subsections of the results are organised into 9 key themes:

- General Experiences of Trainees and Supervisors
- Multi-Sector Training Models

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- Variability within the Multi-Sector Programme
- Learning Outcomes
- Trainees' Preparedness-for-Practice
- HEIW Support
- Trainee Characteristics
- Suggestions for Improvements
- Looking to the future

We note that the terminology of 'supervisor' and 'tutor' were used interchangeably, as were 'trainee', 'tutee' and 'student'; for consistency, we refer to these individuals herein as supervisors and trainees, unless quoting participants directly.

General Experiences of Trainees and Supervisors

Overall, both trainees and supervisors reported mixed experiences of the 2020/21 multi-sector programme in North and South Wales, identifying benefits and challenges and referring to the impact of the pandemic:

> *I think overall my experience has probably been mixed. […] A lot of that is to do with the pandemic and it just being a pilot programme and things.* (NW Trainee, Endpoint)

Key highlights cited by the trainees appeared to relate to gaining exposure across the three sectors of pharmacy, "*getting to see a bit of everything*" (SW Trainee, Endpoint) and the "*ability to actually experience how pharmacists work in different fields*" (NW Trainee, Endpoint):

> *I think overall it was a good year. I think if we take Covid out of the equation it was a good experience. Probably the highlight for me was getting to see primary care for that extended amount of time and getting to work in all three sectors is probably the highlight. But overall, it was a good year.* (SW Trainee, Endpoint)

The year appeared to be demanding for supervisors, particularly in terms of workload, but also enjoyable and a learning experience which placed them in better stead for the future:

> *I found being a tutor quite demanding especially trying to make sure my student was "exposed" to as many situations as possible to obtain the required evidences for the learning outcomes. At times it felt that I was driving this more than the student which on top of being a pharmacist, a Store Manager and unfamiliar with the process, was a challenge.* (Community Supervisor, NW, Endpoint)

> *I think we've enjoyed it. I think actually the pre-regs have enjoyed it and hopefully we'll be better prepared for these guys that are coming in a couple of weeks' time.* (Hospital Supervisor, NW, Endpoint)

> *It's been an enjoyable experience for us. As challenging as it been with everything that's going on. I think the team has really taken well to having more involvement with these trainee pharmacists.* (Medicines Management Supervisor, SW, Endpoint)

Impact of the Pandemic

Given the timeline of this cohort of multi-sector pre-registration training, the impact of the pandemic could not be ignored, and its effect on the programme was by no means negligible. In some instances, it was a challenge to disentangle where issues were programme-related and where they were pandemic-related:

> *Obviously, it's been a horrible time, hasn't it, for them anyway with the Covid and everything, really unsettled. So, whether they would have seen some of the problems they saw if it hadn't have been Covid would be quite interesting as well.* (Medicines Management Supervisor, SW, Endpoint)

> *I can't say what it will be like for people who don't do it in a pandemic. I think that's been one of the main things that's kind of affected my experience […] I think everyone has just had a horrible year. It's not been a good time for anyone to do their pre-reg training.* (NW Trainee, Endpoint)

E&T leads voiced concerns that the impact of the pandemic on the multi-sector programme was so significant it would skew the evaluation and inhibit the possibility of providing an accurate reflection of the programme:

> *Hearing a lot of the feedback, a lot of it is to me a no-brainer and it's not shocking to hear because we've just had this huge challenge that we've had to deal with in healthcare […] It's a shame that the pandemic has happened because I feel like the evaluation isn't going to be a true evaluation of the multi-sector programme.* (E&T Lead, Endpoint)

Multi-Sector Training Models

A key objective of this evaluation study was to explore the advantages and disadvantages of the two distinct models in North and South Wales, and how they compare in terms of meeting the demands of the multi-sector curriculum. Although the two models were distinct, their benefits and drawbacks were less clear cut. As such, instead of reporting on the two models individually (as in the Interim Report), here we report more generally on the themes and reflections raised by participants when considering the suitability of a multi-sector training model. In doing this, we are able to highlight important factors for consideration when organising a multi-sector training programme.

Building Confidence and Developing Relationships

The E&T leads and supervisors felt that the fast pace and intensity of the 2(3x2-month) model in North Wales enabled trainees to build resilience and develop softer, organisational and communication skills that are not captured in the learning outcomes:

> *One of the real advantages I think from what we've seen of the people that have been through the two, two, two programme is it is really intense [….] but what it does mean is that they develop lots of softer skills that perhaps previously you don't necessarily measure in terms of the learning outcomes, and they become more resilient individuals because they've had to deal with working with so many different teams and moving from the different sectors.* (E&T Lead, Endpoint)

However, the other side is that this high pace and intensity could be unhelpful to individuals already feeling overwhelmed or taking longer to settle in:

> *If you have any issues or you're not enjoying the sector or you're feeling a bit overwhelmed or anything, rotating every two months is quite a lot… That's what we all used to joke about. Like as soon as you've got to know people, you're leaving.* (NW Trainee, Endpoint)

> *When people first start in the rotation it takes a while for them to settle in and get to know people and I know by the time they're sort of getting into things they're off again to their next rotation. So maybe a four-month rotation would have helped in that respect* (PC Supervisor, NW, Endpoint)

Alternatively, the 3x4-month model in South Wales allowed trainees to fully immerse themselves in each sector and build relationships with the team. Some also commented specifically that they felt this would be difficult to do on the 2(3x2-month) model:

> *I think if it's going to be split… to have the chunks of time altogether is better than breaking it down any further. There's a lot to get your head around in four months and if you split that in half again, I think you'll lose some of your confidence that you build in the first two months and then if you went somewhere else, I think it would be more difficult to pick it back up again later on in the year. I think like the four, four, four split is probably better but then I haven't experienced the other one.* (SW Trainee, Endpoint)

> *I feel like that [the 2(3x2-month) model] would be quite fragmented, even more so than we found it, but particularly for the students as well because you get into the zone with something, don't you, and then it goes away for a little while, you lose it a bit and then they come back, 'oh yeah I remember what that was about'.* (Medicines Management Supervisor, SW, Endpoint)

Sign-Off of Learning Outcomes

Some trainees in North Wales reflected on the increased pressure in their second 2-month rotation to complete their outstanding learning outcomes and get everything signed-off:

> *…Obviously the pressure was on to complete those learning outcomes in the second rotation because I knew that that was it, I had two more months that I had be signed off.* (NW Trainee, Endpoint)

> *I felt that only having a student in store of only two months at a time was not long enough. The first rotation it takes time for the team and student to settle in together and accomplish anything meaning full especially with our sector's SOPs [standard operating procedures] and e-learning to complete in addition to the work for the learning outcomes. This unfortunately led to a larger amount of work needed in the second rotation to accomplish the required evidences and performance to achieve 'satisfactory' at the 49-week sign off.* (Community Supervisor, NW, Endpoint)

One trainee liked the prospect of being signed off at the end of the first four months as on the South Wales model:

> *I guess, in the three lots of four, you would be signed off at the end of that four month. So, a third of the way through you're signed off on something... I guess that would be nice.* (NW Trainee, Endpoint)

The Value in Returning to Sectors

In contrast to the disadvantage of the increased pressure in the second of the 2-month rotations through a sector, one advantage of the 2(3x2-month) model, and discussed in the Interim Report, is that experience is acquired in all three sectors before applying for jobs. This was not an opportunity afforded by the 3x4-month model.

In the second phase, trainees and supervisors in North Wales reflected on other benefits of the 2(3x2-month) model, specifically the advantage of returning to each sector. Trainees appeared to be "*more confident coming back into the second rotation*" (PC Supervisor, NW, Endpoint) and were able to recognise what they had learnt elsewhere:

> *By the time they come back to you again in four months' time you really see significant improvements in their clinical knowledge and their experience. So, they're invaluable and they might have picked up different activities within that time period.* (PC Supervisor, NW, Endpoint)

> *Obviously when I came back the second time, I'd learned things from other sectors, and I came back with a different perspective and different things that I've picked up. I've had different experiences the second time round.* (NW Trainee, Endpoint)

> *Some of the comments I had from the supervisors from when they had their second rotation of the two months they said, 'oh they benefitted so much in that second rotation because of what they'd been through up to that point. They were able to bring so much into that second rotation'. So, they found the first two months really, really hard but then they gained an awful lot that they were able to bring into the second two months.* (E&T Lead)

Conversely, in South Wales, not only were trainees unable to return to each sector to see what they had learnt elsewhere, but for those wishing to pursue a career in their first sector rotation, there had been an 8-month gap in their experience:

> *I did have some feedback from one of my tutees recently that they were a little bit nervous about practicing now in the very first sector they went into which I thought that was a very valid point.* (Medicines Management Supervisor, SW, Endpoint)

Our data suggests that such feelings might not be long-lasting: one South Wales trainee, who provided feedback after they had taken their registration exam, reflected on how this initial concern was not a problem once they were in practice again:

> *Yeah, and obviously it's like, do you forget it all? Like your community at the start, and I did some locum shifts in community when I first qualified and it was fine.* (SW Trainee, Endpoint)

Key Advantages and Disadvantages of each Model

To summarise the key points raised in this section and break them down into the distinct models, Table 3 provides a summary of the key advantages and disadvantages of the two.

Table 3 – Summary of Advantages and Disadvantages of the Two Training Models

	Advantages	Disadvantages
2(3x2-months)	• Trainees gain exposure to all three pharmacy sectors before applying for jobs • Opportunity to return to sectors and apply new experiences / learning • Intensity and fast pace of training builds resilience and soft skills (communication, organisation)	• Increased pressure when returning to sectors to complete outstanding learning outcomes • High pressure and intensity of model creates difficulties for trainees already feeling overwhelmed
3x4-months	• Allows immersion within each sector, gain competence and sign-off at end of rotation • Better able to build relationships with wider team • Benefits the workplace (logistically)	• Inability to return to sector and apply learning from elsewhere • (In relation to job application) difficult to ascertain suitable order of sector rotations and can potentially leave big gap between training in a sector and working in that sector

Variability within the Multi-Sector Programme

Not only was there a variety of reflections around the model of the multi-sector programme, but it was also apparent that even among trainees on the same training model, each had a unique, individual experience of the programme:

> *I'd say like different in every setting and probably different between every pre-reg* (SW Trainee, Endpoint)

> *I enjoyed it all really which was really lucky because I know not everybody did* (SW Trainee, Endpoint)

These experiences were influenced by a number of factors including differences across training sites, across entire sectors, the availability and readiness of supervisors and also the characteristics of the trainee themselves. In this section, the first three factors take focus, and the latter point is discussed in greater depth in a later section.

Differences across Training Sites

Trainees were perceptive to the different experiences between them and their peers and felt in some cases, this was down to the training sites they were placed in:

> *I feel also that each of our experiences is kind of different because we've been in different training sites. So, my experience of the GP surgery has not been good at all. Whereas there was one girl in the last feedback*

session who said that that's been her best sector. You know, it varies between trainees. (NW Trainee, Endpoint)

I was really lucky that the community pharmacy that I went to, did the services. It's the only pharmacy in the area. It's quite modern. Whereas I think if you went to a chain pharmacy you may not have seen as much. (SW Trainee, Endpoint)

Challenges in Primary Care

The most variability between sites seemed apparent within the primary care setting and was largely down to their capacity to host a trainee:

I'd hear a lot of, 'I'm sorry, but I really can't do much with you today because I've got some work to do'. It's not their fault but I feel like if you're going to put someone in a placement you need to make sure that that place has the capacity to take on a pre-reg. (NW Trainee, Endpoint)

Supervisors and E&T leads reflected on this capacity issue and drew attention to the additional challenge whereby primary care remains a relatively new setting for pharmacy:

Because primary care is quite new… and because of the way the NHS works, the posts have been put in place without even any consideration of how the workloads will get done when people are on annual leave or sick. So, when you put in a trainee on top of that workload some of the supervisors have really struggled with that […] because they're not used to having people sitting with them and needing coaching through different tasks because that's not something we've been doing in primary care. (E&T Lead, Endpoint)

Nonetheless, one trainee emphasised that this new role of pharmacists in the primary care setting and unfamiliarity among trainees was exactly why more trainee support was needed in that setting:

My most negative experience this year has been primary care because I don't think that the GP surgery that I'm at has the capacity to take on a pre-reg to be honest. They're under-staffed. They're over worked which isn't their fault. Obviously, it's not a great situation for them to be in but I think that pre-regs need a lot of supervision in primary care. Because no one has done it before. (NW Trainee, Endpoint)

Supervisors commented specifically on the challenges of training in managed practices in primary care and the "*extremely high-volume work*":

I just think that a busy managed practice, although there is lots of things to see and observe and you get a vast range of experience, I don't think we were giving any of the tutoring time or time to properly mentor our student … I don't think there was much thought gone into where they were placed. They just decided to plonk them into managed practices because there was always a pharmacist around there, which is true, but the pharmacists that are there are actually working flat out. It's just so full-on. (PC Supervisor, NW, Endpoint)

Differences across Pharmacy Sectors

Trainees also commented more broadly on the different experiences they had across the three pharmacy sectors. However again, views were not unanimous. Some trainees and supervisors were of the opinion that hospital and community settings were better equipped to host trainees: they commented that supervisors, as well as wider staff, had more time to dedicate to trainees in these settings, whereas in primary care, supervisors' time was more limited, and often support from the wider healthcare team was not available:

> *I think the pressure is taken off in the hospital and even in community with [having] that wider pharmacy team. So, my tutor in hospital took me onto my first ward and everything, but then somebody else took me onto another ward for the next set of weeks and then somebody else took me on, so it wasn't always down to that person. Whereas I think in primary care you are designated to one person. It's often just that one practice pharmacist.* (SW Trainee, Endpoint)

Others felt that this was only true for hospital settings, and staff in community and primary care settings were under greater pressure in terms of time and workload:

> *I think in the hospital, they're very used to having pre-regs and they're very used to the training and they have more time to do it with you, there's just a bit more structure. Whereas I think in community and primary care, and obviously with Covid as well, I think they were all more under pressure, I found they didn't really have as much time to go through things and then with some of the competencies I thought, not that they were unrealistic, because you do need to know how to do some of them but you weren't guaranteed to see it.* (SW Trainee, Endpoint)

> *I think in hospital… they have obviously got their own normal job to do but they will be given time for the student as well, but it's just GP pressure and community pharmacy I imagine you've very little time to be pushing your student, you know, where's the evidence for this, where's the evidence for that? […] In meds management you can block off an hour here. This is my time to do this. You can't do that in GP practice or community pharmacy. You've got patients and queries that are always going to need answering straightaway.* (Medicine Management Supervisor, SW, Endpoint)

Despite these observations, there were some trainees who felt they had received the *least* support during their hospital rotation and had received more in community and primary care:

> *I felt like the most support I have received was during my community pharmacy and primary care, but the hospital it was a bit more difficult because my tutor she was covering different wards …. So, I felt like the interaction between my tutor was much less. We had a weekly meeting which was fine… but then with the primary care and the community pharmacy I felt like I had that continuous exposure to my tutor which really helped in terms of support and everything.* (NW Trainee, Endpoint)

Similarly, a hospital supervisor reflected on the larger number of trainees in hospital settings which inevitably limited the opportunity for one-to-one interactions between trainees and their supervisors:

> *She had a good tutor in community, and I think the one-to-one sort of nature of that led to her getting much better, much quicker. Whereas in the hospital she was one of a hundred and didn't have that one-to-one support just because of the sheer size and volume and numbers.*
> (Hospital Supervisor, NW, Endpoint)

The availability of supervisors is a point noted in the next section.

Availability and Readiness of Supervisors

Several trainees commented on the importance and value of one-to-one interaction with their supervisors. They reported that this varied not only by sector but also within sectors:

> *Both in the primary care and community placements, you're with your tutor all day, every day. So, you feel like if you have any issues, they're right there to help you* (NW Trainee, Midpoint)

> *Hospital could be a little bit more difficult. Your supervisor is quite busy* (NW Trainee, Endpoint)

> *I had a really good primary care experience, and I would put that largely down to the tutor I had, but then I know somebody else who was on the multi-sector who was in the different surgery and they had a really difficult time of building, like, that relationship and setting what they were willing to do on their own and things like that which I think in primary care it's definitely down to whether you can sit in the same room and do that period of shadowing or whether they had such a big workload and they don't have time for that one-on-one interaction.* (SW Trainee, Endpoint)

Some supervisors themselves also acknowledged the likely variability in supervisor support:

> *You'd probably get different tutors as well. Tutors, like myself and my colleague … knew exactly what evidences we were expecting, and we would tell them at every catch-up meeting … what we were looking for that week. So, we probably were hand holding a little bit, but I think we have to be because we had such a short period of time with them.*
> (Medicines Management Supervisor, SW, Endpoint)

As well as availability, supervisor readiness was also an influential factor on trainees' experiences. It was evident from trainees' reflections that some supervisors were less prepared than others and less familiar with the training process and components. In some cases, it was described as the "*blind leading the blind*" but in other instances supervisors were "*very on the ball*" and "*very helpful*":

> *I noticed this year with my supervisor anyway, … it was like the blind leading the blind. They didn't really know how to use the e-portfolio […] So often, we spend like half an hour sitting there trying to navigate the portfolio, it just wastes time.* (NW Trainee, Endpoint)

> *We did sort of ask little things, you know questions of each other [other supervisors], but it was like the blind leading the blind really because none of us really knew what we were doing.* (PC Supervisor, NW, Endpoint)

This was echoed by reflections from the E&T leads who provided further context to the challenges faced by supervisors this year. The training handbook and support material had not been provided until late on which meant supervisors were limited in the time they had to prepare for the start. The pandemic also exacerbated this challenge, creating competing priorities, and affecting their own supervisor training for the programme:

> *It doesn't surprise me that with some of the supervisors it was like the blind leading the blind because the Handbook, the curriculum itself, was only given a week before the placement started. That really doesn't give you enough time to digest a brand-new curriculum* (E&T Lead, Endpoint)

> *The training for designated supervisors... wasn't maybe as robust as it could have potentially been without the pandemic situation. Lots of the training was online, a forum where it's probably quite difficult to gauge and understand and for people to ask questions.* (E&T Lead, Endpoint)

> *The pandemic did have a big impact, not just in what the trainees were able to do, but also in our capacity to plan and prepare because the pandemic hit in March and the trainees started in August and I remember in that timeframe being invited to loads and loads of different meetings and training, so I missed lots of things because there was so much else going on. So, I felt... I came into it really unprepared.* (E&T Lead, Endpoint)

HEIW Support

The importance of support from supervisors and the wider healthcare team has been noted. Trainees and supervisors were additionally asked about their experiences and perception of the support they received from HEIW. The pre-registration Regional Leads appeared to be a welcome means of support for both trainees and supervisors, particularly in addressing questions about evidencing learning outcomes:

> *Our Regional Lead was really helpful throughout it all. ... She was always available to talk to and ask any questions, and ... if you sent something in you would usually get a reply quite quickly. So, I would say they were really good to go to if you had any questions about evidencing. I think they provided some just general support for people who are struggling.* (SW Trainee, Endpoint)

> *I had amazing support from [pre-registration NW Regional Lead] particularly on what a good piece of evidence should look like and tips on encouraging our student to complete the evidence collection in a timely manner. [Regional Lead] has been very supportive and always quick to respond particularly over my concerns in the first rotation that we were not having any interactions for services or OTC [over-the-counter consultations] to enable our trainee to gain experience.* (Community Supervisor, NW, Endpoint)

In North Wales, they introduced the unique role of a Project Support Officer (PSO) who provided administrative support to trainees and supervisors. Although not a traditional role, it appeared to be welcomed by participants:

> *I think that the two people that really stood out to me this year in terms of support and just being able to just have a chat to someone about whatever you're feeling like or if you're feeling stressed or whatever was [PSO] and [pre-registration NW Regional Lead]. They've both been brilliant this year. I couldn't fault anything that they've done.* (NW Trainee, Endpoint)

> *I was a bit confused about who should I email about specific queries. [PSO] was able to direct me … She was helpful in terms of whenever I had a query, she was able to direct me where I needed to go.* (NW Trainee, Endpoint)

> *If I was designing it, I would definitely put somebody like [PSO] in there, and I think she was the right character as well. So, she was a good listener to the pre-regs, was very aware of confidentiality, would always ensure gaining that trust …. And she gave me some insights into my pre-reg which was very valuable. So, yeah, I thought very useful for pastoral care and for the practicalities of sorting out things.* (Hospital Supervisor, NW, Endpoint)

Learning Outcomes

A key focus of this evaluation was to explore the feasibility that trainees could meet the curriculum learning outcomes. As such, conversations with all three participants groups (trainees, supervisors and E&T leads) involved considerable reflections on the suitability of these outcomes. A common comment from all three groups related to the quantity of outcomes. For primary care in particular, the number was "*quite overwhelming*" (E&T Lead):

> *It wasn't an equal split. I found secondary care the easiest to be signed off in. The check list was a lot smaller than the primary care. The primary care check list that you have to have sign off at the end was like two pages of stuff, whereas the community and the secondary care one was just one page.* (NW Trainee, Endpoint)

Concern was expressed by E&T leads that some trainees were following a checklist rather than "*immerse[ing] themselves in the experience*":

> *I just wonder if … they're coming at it from, 'oh at least this will allow me to tick the box', rather than gain a rounded picture* (E&T Lead, Endpoint)

There were also comments around "*some duplication*" between the learning outcomes and the booklet that trainees were required to complete:

> *We had to complete the curriculum as well as the handbook… and I felt there was a bit of duplication …. So, we needed to complete certain elements in the handbook, but we also needed to complete an evidence as well.* (PC Supervisor, NW, Endpoint)

In addition to concerns about the quantity of learning outcomes, participants also thought that some were too specific to an individual sector. Some trainees reported feeling competent in an area but were struggling to find an opportunity to demonstrate it in a particular setting:

> *I think that it would be better if it was more integrated in a sense. You know, times where I've been in primary care scratching my head over a learning outcome where I've done loads of that in another sector […] if you've done loads of one thing why would you be stressing about it somewhere else and planning to do more of it again? I felt competent in these things but because I hadn't ticked it off in primary care, you know, I was getting stressed about that.* (NW Trainee, Endpoint)

The pandemic meant changes in services and therefore limited trainees' exposure to certain scenarios and opportunities for evidence collection:

> *The pandemic definitely had an impact on the experience. My store is tiny and consequently we are only able to have one patient in at a time which has led to large queues but has also reduced the number of people visiting for services and over-the-counter medications. This made obtaining the number of evidences suggested for some of the learning outcomes very difficult and in the end we had to look at quality rather than quantity.* (Community Supervisor, NW, Endpoint)

Trainees' Preparedness-for-Practice

At the end of the multi-sector programme, trainees were asked about their sense of preparedness to enter practice as a registered pharmacist. Again, we received somewhat mixed views from participants. Before detailing the findings, it is important to highlight the limitation of such feedback. Data were collected from trainees at the end of their training when most were yet to spend any time in practice as a qualified pharmacist. The following commentary therefore reflects their expectations rather than their actual experience.

When asked about their sense of preparedness, often trainees considered how they might compare to their single-sector-trained counterparts. On the positive side, as the multi-sector required integration into new teams throughout the year, some trainees identified how this had helped them to develop into more adaptable and versatile pharmacists:

> *I'd say after the year now I'm most prepared for starting in a new team… that doesn't daunt me really at all. I feel like I'm ready to just integrate into any team.* (SW Trainee, Endpoint)

> *I think it gives you a good overview of everything and I think it makes you quite a versatile pharmacist because you've had these experiences in other sectors and you can draw from each one. You can kind of see how they all link together. I think in that sense it's good and I think that it has improved my resilience just because of the challenging nature of it and the fact that you have to integrate with so many different teams of people moving around* (NW Trainee, Endpoint)

A downside however, often relating specifically to hospital settings, was that trainees appeared to feel less prepared for clinical and safety aspects of practice and thought they would have been better prepared had they spent the full year in one sector:

> *I'd say I'm least prepared for the…I think everyone feels this way, but the clinical check in hospital and things like that, just because I hadn't had that extended time. I think you have to have that basic understanding of how the prescriptions work and everything to be able to pick up all the issues, but I'm most daunted by having enough experience in one place to be able to pick up the issues safely with things* (SW Trainee, Endpoint)

> *I think it goes without saying that I would be more prepared for hospital if I'd done a full hospital placement, but I think I've had a decent amount of experience. I've got like a baseline, but I definitely don't feel 100% confident to go in as a Day 1 pharmacist and to do the job, but obviously we're going to get training and things like that.* (NW Trainee, Endpoint)

This final point around a need for initial training in the first job as a pharmacist was raised by other participants and the E&T Leads. Some felt it was likely that they would require support in the early stages of being a registered pharmacist in practice. One trainee emphasised that should they need support, they knew where to find it:

> *I feel like my exposure to the three sectors has really given me a boost to what would I expect when I start working and who to contact if I needed help.* (NW Trainee, Endpoint)

> *Because they're not having a prolonged period of time in one area… when they do become qualified, the education and training needs for those NQPs has gone up greatly. So, they need a higher level of support when they come in as a newly qualified pharmacist* (E&T Lead, Endpoint)

> *I would imagine that, yes, you're kind of jack of all trades, master of none and therefore perhaps after some intensive support hopefully those transferable skills that you've learnt on the journey might stand you in good stead, but I would imagine those first few months to be quite turbulent.* (E&T Lead, Endpoint)

An interesting point made by one trainee related to how they felt after four months was sufficient to become competent working at that particular site, but not within a sector in its entirety:

> *Four months is only really just enough time to get competent in that setting but not necessarily the sector itself.* (SW Trainee, Endpoint)

Comments around trainees' preparedness to enter the primary care setting drew attention to the fact that regardless of training, newly-qualified pharmacists in this setting is uncommon:

> *Traditionally, there hasn't been that many junior pharmacist posts in primary care. So generally, people have entered the sector a few years after qualification, after working in either hospital or community pharmacy for a few years and a number of years often in many cases.* (E&T Lead, Endpoint)

A trainee also reflected how they felt "*it's very unlikely that you'd get a job in primary care when you're newly qualified*". (SW Trainee, Endpoint).

However, an important line of commentary related to the importance of the individual characteristics of the trainee:

> *I think he's probably a character that would flourish in any of the sectors to be fair to him.* (Hospital Supervisor, NW, Endpoint)

> *I suppose it varies on individual really and how quick they get up and running. […] You may get a few that may struggle and then the increased level of support is even greater. [...] But then you've got the other side of it where they have experienced all different areas. So, they do have an appreciation of all different sectors and they can draw in on those experiences then when they come here to provide more, like, seamless care for patients. There's two sides of it really.* (E&T Lead, Endpoint)

Trainee Characteristics

This final point around the varying preparedness of individual trainees fed into a larger theme within the data around the influence of individual trainee characteristics. Just as individual supervisors had an impact on the trainees' experience of the multi-sector programme, reflections on the experiences were also influenced by characteristics of the trainees themselves:

> *It varies by individual really and how quick they get up and running.* (E&T Lead)

> *There has been a lot of pressure. It's a very stressful job anyway … and …my particular student suffers with anxiety. So, I felt that's been more of demand really on myself. That she's more [in need of] nurturing and more coaching and it has taken a lot of time.* (PC Supervisor, NW, Endpoint)

Who Best Suits the Multi-Sector Programme?

Given the diversity of trainees and their characteristics, participants were asked who they thought best suited the multi-sector programme. Despite the intended Wales-wide rollout of the multi-sector training programme that would see all Foundation trainees complete it, it was evident, among both trainees and supervisors, that the programme was not suited to everyone and required certain characteristics of the trainee. In particular, trainees needed to be capable, adaptable, highly organised and pro-active in order to manage the fast pace and intensity of the programme:

> *I think you have to be a particular kind of person who's prepared to change job almost every four months […] I do definitely think that you need to be a resilient person to go from job to job and meet new teams constantly.* (Medicines Management Supervisor, SW, Endpoint)

> *I would recommend it more to people who don't mind the adaptability side of it and who are willing to actually want to experience the different sectors* (NW Trainee, Endpoint)

> *I think it's just a faster pace, the multi-sector. It felt like I was doing a lot more evidencing just to be able to show competency in every sector. So,*

> *I would say you have to be organised and adaptable […] you've just got to integrate straightaway to be able to get the most out of it… because it was definitely just a very fast pace.* (SW Trainee, Endpoint)

Supervisors highlighted that some trainees would, and did, struggle with the multi-sector programme:

> *I worry that it's not for everybody. I think that some students would struggle with this model of having to effectively start a new job every four months […] I think it does take a certain type of student to be able to really perform well on this programme.* (Medicines Management Supervisor, SW, Endpoint)

> *Fortunately, most of my pre-regs were really good. They've been committed, but if you have got one that's not, it would be very difficult to get things done.* (Community Supervisor, NW, Endpoint)

> *I'd heard … that there's a few of them struggling a little bit. So emotionally perhaps with the expectations that are on this time of the year, coupled with an exam, coupled with Covid, coupled with lots of other things, that it is an awful lot of work to do within those four months.* (Hospital Supervisor, NW, Endpoint)

Some trainees themselves reflected on the high levels of stress and anxiety they had experienced during their training:

> *There's been good aspects but also, I feel that I've experienced a lot more stress and anxiety than maybe some single sector trainees wouldn't have experienced. If I'm being honest, if I knew what I know now it would have been like, I wouldn't have chosen the programme.* (NW Trainee, Endpoint)

Some supervisors and E&T Leads also commented on the importance of the support network that trainees have around them and how local connections or prior establishment in Wales can help trainees to integrate and reduce feelings of isolation:

> *I think you need … vocal, so that you ask for help. I think the surroundings matter more, so whether it be family help, friends help, but to feel isolated when you perhaps haven't got the family at work because you probably haven't developed those links. So perhaps you need to have your family around you because you're not getting that sort of camaraderie at work within two months before you're rotating. I think that might expose some vulnerabilities within people.* (Hospital Supervisor NW, Endpoint)

> *If they are organised, if they are very capable, if they're from a certain university, if they've got foundations in Wales. So, we are finding, you know, they've got a family in Wales. They've got that set up, that support. They're onboarding and integration into that first four month is a lot easier because it is full throttle.* (E&T Lead, Endpoint)

Suggestions for Improvements

Given the variety of experiences among trainees, there was also a variety of suggestions for possible improvements. Nonetheless, some common suggestions were raised.

Early Information and Training

Several trainees and supervisors highlighted how they had entered the programme with limited understanding of expectations and progression timelines. Often there were comments around how they would have benefited from clearer information at the start to better inform expectations:

> *I understood the programme later on, after I'd done my second rotation. So, it was a bit all confusing at first. If the pre-regs were able to get a better understanding, like what to expect, what they will be doing.* (NW Trainee, Endpoint)

> *I think one of the main things that I would benefit from really is just having a better timeline focus really. I know that we did have communication, but I think if it was set out potentially more like the GPhC, they've got their dates and things like that on the website. I think if we could just have a clearer plan in place in terms of what HEIW wants at a particular date and what we need to do for legality for the GPhC. […] It's maybe just having a little bit more of a reminder maybe or just even having an actual sheet that we're a bit more aware of deadlines and things like that.* (PC Supervisor, NW, Endpoint)

There was a desire for more training on how to use the e-portfolio and submit evidence, this was cited in the Interim Report as a significant challenge early on in the programme. That said, previous comments have highlighted participants' awareness of how the pandemic limited the training that could be provided:

> *I think more training needs done and maybe get the trainees and the tutors together. That's not been possible this year, but in future if that is possible, I think that would be really helpful, so that everyone knows what's expected of them* (NW Trainee, Endpoint)

> *Potentially just providing that one-on-one training or giving everyone a better understanding of the software. We had tutorials but they were the same ones every time and we just got the impression that even HEIW were trying to work it out at the same time as us.* (SW Trainee, Endpoint)

The challenges faced by managed practices in primary care have been emphasised and as such, some supervisors felt it would be beneficial to allow trainees to move around to different surgeries to ensure maximum exposure:

> *I wondered whether a student could be linked to a pharmacist that visited different surgeries, rather than just being clunked in a managed practice* (PC Supervisor, NW, Endpoint)

Learning Outcomes

There was a desire among all participant groups to reduce the quantity of learning outcomes and increase the flexibility in how and where they can be demonstrated. Trainees made comparisons with the multi-sector learning outcomes and the GPhC performance standards:

> *I looked at the GPhC performance standards - obviously we don't go off those but our learning outcomes are mapped to those… we have 105 this year that we have to meet whereas there's 72 performance*

> *outcomes which are designed in such a way that they can be applied to any sector…* (NW Trainee, Endpoint)

> *I think that it would be so much easier if there was one set of learning outcomes and they were like the GPhC ones, so more ambiguous, so you could just link them to any sector.* (NW Trainee, Endpoint)

This view was echoed by some of the supervisors who highlighted the unnecessary duplication. One also drew the comparison with single-sector trainees who only had to demonstrate competency in the one sector:

> *We need to reduce the size of the booklet and make sure that we don't duplicate work from the booklet as well as on the curriculum and making sure that we're not putting too much pressure on the trainees to complete a certain amount of numbers for each evidence and activity.* (PC Supervisor, NW, Endpoint)

> *I think there might an argument to put a few of the LOs [learning outcomes] into the any section. Rather than kind of proving that your worth the same skill in each of the three different sectors. … If you compare it to the ones that are doing the whole year, they just do it in a hospital, and they do it once to prove that they can do it* (Hospital Supervisor, NW, Endpoint)

Where trainees had emphasised their frustration with the requirement to demonstrate a learning outcome with particular evidence and in a particular sector, E&T Leads were also forthcoming in their desire for greater flexibility in what is considered suitable evidence and more trust in the supervisors' judgement:

> *There needs to be the flexibility in the activity that's linked to the learning outcome, because it's great to have an example… but if … your supervisor thinks there's a better way of showing that learning outcome, then I think that should be an option. But it feels very much like, this is your learning outcome, you have to do this activity to tick this box.* (E&T Lead, Endpoint)

Supervisor Communication and Handover

The potential impact of the multi-sector programme on trainees' wellbeing has been emphasised in preceding sections. Although this was picked up by supervisors, many felt there was a need for greater communication between supervisors on these personal factors, rather than just a trainee's progression on the curriculum. In particular, where a trainee was struggling, supervisors felt they needed to be more aware of this so they could act appropriately and sensitively:

> *It would have been useful to talk with both the tutor before and after my sector to give a handover, even if it was just basically saying everything is on track or maybe the student needs to provide more evidences a week [...] I only spoke to one tutor once before my trainee joined my store. I felt it odd that we haven't been encouraged to communicate as perhaps sharing ideas could have helped. E.g., how to engage a trainee that has no interest in a particular sector [...] Having attended a recent training day aimed at new tutors this month I found it very beneficial to hear about the experiences the other tutors were having with the programme.* (Community Supervisor, NW, Endpoint)

> *Verbal communication would have been much better than the form that was all nicely typed out but didn't really say what you really needed to know. So, I think a learning point for us here is that regardless of whether someone is phoning us, we're going to phone them.* (Hospital Supervisor, NW, Endpoint)

In instances where there had been a more informal, verbal line of communication between supervisors, this had been invaluable in helping supervisors gauge the needs of their trainee:

> *I had to handover then to primary care. They're in the same building, so that verbal handover between me and the next tutor I think was invaluable. I sent her the form, but it was so much better to have that half an hour chat that we had as to the feelings that I had, rather than competencies that she's achieved, and I think that was very useful.* (Hospital Supervisor, NW, Endpoint)

Support for Training Sites

It was evident that some training sites had limited capacity in hosting a trainee and was troublesome to both the supervisors and the trainees. This was particularly problematic in the primary care setting and as such, there is a need to ensure that workload is sufficiently managed, and sites have the necessary support mechanisms in place to host a trainee:

> *If they are going to insist putting students in managed practices then it could be made easier or they maybe should employ another pharmacist to do our work, while we then support the student. So, I think there needs to be some leeway for us because we've all found it difficult.* (PC Supervisor, NW, Endpoint)

Looking to the Future

Despite the challenges in 2020/21, not helped by the pandemic, the E&T Leads and some supervisors spoke positively of the future, highlighting how the year had been a learning curve and placed them in a better position for the 2021/22 cohort. There were particular comments on the now clearer expectations among individuals and clarity of their own role within the programme:

> *It was definitely a big learning curve and it's been so much easier this year. We know the supervisors roughly know what they're doing, the workplaces know what to expect from a trainee, the other healthcare professionals know what they are and what they do and why they're there.* (E&T Lead, Endpoint)

> *I think we've learnt an awful lot as a department about how this sort of programme can run. I felt that we were a bit haphazard last year. Covid obviously didn't help. I think the relevant parties within the department have got a better understanding of what's being asked of them, and I feel that the trainee pharmacists seem to be better prepared.* (E&T Lead, Endpoint)

Some supervisors emphasised that many improvements had already been actioned and put into place for the 2021/22 cohort:

This year I'm going to have a rota produced so I can tie in all my different colleagues in different locations because I don't have the opportunity to work side-by-side all the time. So that will be the main lesson learnt really from my point of view. [...] Communicating with the other sector tutors as well to see how things are going, if there's anything that needs picking up, we tend to do that. (PC Supervisor, NW, Endpoint)

I've enjoyed doing the programme but because we're in meds management it's sort of a bit stop-start for us. We've done the first four weeks of every primary care rotation that they have, so it was a little bit fragmented sometimes. So, we changed it a little bit for next year. Now we're going to have one day-a-week throughout their primary care time. [...] So, I think this way it'll be more defined. The DS [designated supervisor] will see them every week throughout the whole of their time in primary care and we'll just be there for them to come us for one day-a-week to do some meds management. (Medicines Management Supervisor, SW, Endpoint)

Employer Buy-In

In terms of the employers' positions and their place in the future for the multi-sector programme, E&T Leads commented on a poor return on investment whereby the multi-sector programme demands more time and input from supervisors but without any certain gain in newly qualified pharmacists. With the single-sector models, trainees have chosen their sector of work, and it is likely that if they have trained at a particular site, they will stay on once registered, if a post is available. This is much less the case with the muti-sector programme:

We've seen an increase in intensity in the training and education burden, but we've lost a workforce. So, we no longer have return on investment for these trainees. (E&T Lead, Endpoint)

There was also evidence to suggest that there was still no widespread recognition of the programme among employers and sometimes trainees felt disadvantaged in interviews when they had not yet experienced the relevant sector:

In my experience, like applying for hospital jobs... it didn't seem as though the multi-sector thing really stood out or mattered because I didn't get many invites back for interviews and things. (NW Trainee, Endpoint)

I also interviewed Cwm Taf and I didn't get a post and the feedback was that I didn't have enough hospital experience, although the things I was talking about related to primary care were really interesting and really good. I didn't have the fundamental understanding of what hospital wanted. (SW Trainee, Endpoint)

However, there was some evidence that Health Boards familiar with the multi-sector programme had responded accordingly and adapted their interview process to better accommodate the multi-sector experience:

We did revise our questions actually, so that we were able to accommodate the transferable skills from the sectors because we were conscious that some might not have been exposed to a hospital drug

chart. So, we've done away with any drug chart questioning. So, it is just about as an employer, knowing the landscape and knowing what your candidates are coming through as. (E&T Lead, Endpoint)

Discussion

As is evident in our reporting, perhaps the most significant finding from this evaluation was the diversity of views and experiences both between and within training models. Reasons for the wide variety in experiences has been explored, where a number of factors were seen to be at play: differences across pharmacy sectors and training sites, the availability and readiness of supervisors and also the characteristics of the trainees themselves.

One of the aims of this study was to contrast the advantages and disadvantages of the two models of the programme and how they compare in terms of meeting the demands of the curriculum. On the basis of our analysis of the results, neither model comes out as a clear-cut preference and rather that choice is contingent on a number of factors. This report presents the context and the detail about such factors by providing examples in practice and numerous illustrative quotes from participants.

Nonetheless, in order to create the best likelihood of a positive training experience, consideration should be given to a number of matters. Training sites need to ensure that they have capacity to host a trainee, and supervisors and other support staff must have sufficient training and preparation to undertake their role. To gain the most from the programme, trainees need to be pro-active, highly organised and able to adapt to the fast pace of the programme and the process of integrating into multiple teams. As a corollary, all participants reflected that the multi-sector programme would not be suited to everyone but rather, requires certain characteristics. This is an important consideration given the forthcoming Wales-wide rollout of the programme that will see all trainees undergo multi-sector training.

Trainees and their supervisors reported that some trainees experienced high levels of stress and anxiety. Supervisors thought that improved communication between supervisors would foster greater awareness and sensitivity towards this and ensure that aspects of pastoral care are addressed in handovers between sectors, alongside training experience and development.

In terms of trainees' preparedness-for-practice, there were again mixed views among participants. Participants recognised the value in experiencing all three sectors and their understanding of the transfer of care and patient journey. This echoes the findings from our evaluation of previous multi-sector programmes and cohorts. There were cases where trainees expressed feeling less prepared for clinical and safety aspects of pharmacy, typically in the hospital setting. However, previous longitudinal evaluation of the multi-sector programme that involved speaking to a number of multi-sector trained pharmacists after they had spent a year in practice, demonstrated that this was not a longstanding concern and pharmacists themselves and their line managers commented on how pharmacists quickly adapted to the setting and were not disadvantaged against their single-sector trained counterparts.

It was promising to hear comments from supervisors and E&T leads that highlighted how the programme had been a learning curve and that many issues from 2020/21 had

already been addressed and changes had been planned and embedded into the delivery plan for the 2021/22 cohort.

Challenges that remain include scope to condense the learning outcomes and increase the flexibility in how and where they are demonstrated. We recognise that changes have already been made to the curriculum for the 2021/22 cohort and therefore recommend continuous review of the impact of such changes.

Perhaps a longer-term challenge is located with the employers. There remains a perception that there is a lack of return on investment for employers. That is, where single-sector trained pharmacists would pursue that chosen sector, their multi-sector counterparts have choices and are thus employers are less likely to welcome their trainees back as qualified pharmacists. There is also more to be done in increasing awareness among employers of the multi-sector programme and adapting their interview protocols to accommodate these trainees and the experiences they will have had at the point of interview.

Strengths and Limitations of Evaluation

Having discussed the findings from this study and the implications, it is important to also draw attention to some of the strengths and limitations of this study and its methodology. Key strengths include the capturing of multiple voices (trainees, supervisors across sectors and E&T leads) and the process of sharing preliminary findings with E&T leads to guide more focused discussions and provide additional context. The two-phase approach to our study enabled clarification of earlier findings, whereby preliminary analysis after Phase 1 allowed for more targeted investigation in Phase 2. Evident from our findings reported in the Interim Report and those reported here is the longevity of views among participants across phases.

Nonetheless, the study is not without its limitations. Perhaps most notable is the impact of the pandemic on the multi-sector programme and subsequently the evaluation. As highlighted in the results, on occasions it was difficult to disentangle experiences that were pandemic-related and those that were exclusively programme-related. Nonetheless, we have provided substantial detail in relation and contextualised our results within the complex landscape in which this study was conducted.

We also recognise the limitation in the time of data collection in Phase 2. Although an objective of this study was to explore trainees' preparedness-for-practice, this could only be explored in terms of participants' expectations rather than their actual experiences. The study could therefore be strengthened by longitudinal follow-up of these trainees after they had experience in practice as a registered pharmacist. However, this is something that we have carried out in our evaluation of previous multi-sector cohorts and programmes. These previously implemented longitudinal studies provided a valuable understanding of the wider context and how such previous findings might apply to this study.

Conclusion

To summarise the key findings from this study we have compiled the table below which maps the key findings from our data in both Phase 1 and 2 against our research objectives.

Table 4 – Key Findings Mapped against the Evaluation Objectives

The feasibility of achieving the curriculum outcomes
• All participant groups generally felt there were too many learning outcomes, particularly in the primary care sector, as well as duplication with the trainee workbook
• Quantity of outcomes meant trainees were often more focused on ticking boxes than immersing themselves in the multi-sector training experience
• Some learning outcomes were perceived to be too sector-specific – there was a desire for greater flexibility in how and where outcomes were demonstrated
• Characteristics of the trainee are important – to thrive in the programme they need to be capable, adaptable, organised and pro-active to match the fast pace and high intensity of the programme
• The pandemic influenced what services were running and sometimes limited trainees' exposure to particular opportunities for evidence collection. It also impacted the extent to which supervisors could prepare for the programme

The extent the multi-sector training programme prepares trainees for practice
• Participants held mixed views on how prepared trainees were to enter practice upon completion of their multi-sector training
• The need to integrate into multiple teams throughout the year helped trainees to develop into adaptable, versatile pharmacists
• Some trainees felt less prepared for clinical and safety aspects often citing the hospital setting, in particular. Previous longitudinal evaluation suggests these are common concerns but not longstanding
• Participants recognised that trainees would need support early on in their posts as registered pharmacists
• Supervisors and E&T leads also felt the preparedness of trainees would depend on the individual
• Results are somewhat limited by the time of data collection, however they are supplemented by our previous evaluation of multi-sector training and longitudinal follow-up

Views of education and training leads
• E&T leads felt the results were not surprising and generally agreed with views of trainees and supervisors. They also highlighted impact of trainee characteristics and importance of having a wider support network
• E&T leads provided additional context to challenges of the year (e.g. the pandemic, readiness of supervisors and support staff, wider landscape of primary care setting)
• They thought that the year had been a useful learning experience and placed them in good stead for the following year and the future
• The imbalance between the increased intensity and burden on training sites and supervisors but reduced return on investment was noted
• Concerns were expressed that the pandemic had skewed the programme and the evaluation and thus could inhibit an accurate reflection of the programme.

Comparison of two models

The 2(3x2-month) Model:
- Provides trainees with exposure to all three sectors before applying for jobs
- Provides opportunity to return to sectors and apply new learning and experiences. However, there is increased pressure when returning to sectors to complete outstanding learning outcomes
- The intensity and fast pace of training builds resilience and softer skills but can also create difficulties for trainees already feeling overwhelmed

The 3x4-month Model:
- Allows immersion within each sector, gain competence and sign-off at the end of each rotation, however not returning to sectors means new learning from elsewhere cannot be applied
- Provides better opportunities to build relationships with the wider team and benefits the workplace logistically
- It is difficult to ascertain a suitable order of sector rotations and can potentially leave a big gap between training in a sector and working in that sector

Appendix 1 – Trainee Endpoint Question Schedule

Training Experiences

What has been the **highlight** of the multi-sector training programme?

How have you found the **structure** and duration of the rotations? (NW on 6x2month, Swansea on 3x4month)

What are your views on the **order of rotations** across sectors? Any preferences?

[NW ONLY] how did you find the process of returning to sectors?

Meeting Competencies

In terms of gaining competencies, how did the **training sites compare** across community, hospital and GP settings?

>Did you gain different experiences? Competencies?

>Were curriculum **competencies transferable** across sectors?

>Did you have sufficient exposure to gather **evidence** for competencies?

>Were there any competencies that are more **difficult** to meet than others?

>What was the impact of the pandemic on your experience?

Support

How would you describe the nature of your interaction with your **tutors**?

>Frequency of meetings? Nature of meetings?

What was the nature of support you received from **HEIW**? Was this valuable?

>[NW ONLY] What is your view on the role of the Project Support Officer?

>What was your experience of the fortnightly check-ins?

Did you receive any support from the **wider healthcare team**? What was the nature of this?

>Did they have an **awareness** of your needs and requirements as a trainee?

Was there any area where you felt support was **lacking**?

Preparedness-for-Practice

Do you think you will complete the training feeling **confident** to enter *any* sector of pharmacy?

Do you have a **preference** of pharmacy sector? Have you secured a **job** post?

To what extent do you feel the training programme has **prepared you for practice**?

>What do you feel **most** prepared for?

>What do you feel **least** prepared for?

Future of Programme

Do you have any suggestions of how the programme might be **improved**?

Would you **recommend** the multi-sector programme? **Who** do you think it is most suited to?

Any other comments?

Appendix 2 – Educational Supervisor Endpoint Question Schedule

Training Model

What has been your <u>general experience</u> as a tutor on the multi-sector programme this year?

> What was the impact of the <u>pandemic</u> on the programme?

How did you find the <u>structure and duration of rotations</u>? (NW on 6x2month, Swansea on 3x4month)

> What is your opinion of the <u>order</u> of the rotations across sectors? Do you have a preference?

Do you feel trainees had sufficient <u>time</u> in [relevant sector] to gather relevant <u>evidences</u>?

[NW ONLY] how did you find the process of your <u>trainee returning</u> to your sector?

Curriculum

What is your view on the <u>curriculum outcomes</u>?

> Are they <u>relevant</u> to your sector of pharmacy? Anything <u>missing</u>?
> Did the trainees achieve the curriculum outcomes in your sector?

Are there any competencies in particular that you think trainees <u>struggled</u> to meet?

Overall, do you think the multi-sector training programme has <u>prepared trainees for practice</u> in [relevant sector] pharmacy?

Support

Do you have any <u>communication with the other tutors</u> in other settings?

> If yes, what is the nature of this communication?

If no, do you think it would be helpful to have more of a <u>structure</u> to enable this?

[NW ONLY] What is your view on the role of the <u>Project Support Officer</u>? (prompt about fortnightly check-ins with trainees)

What support did you receive from <u>HEIW</u>? Was this valuable?

> What is your view on the <u>trainee reports</u> from HEIW?
> Do you feel you have sufficient information to make an <u>assessment</u> of your trainee and <u>sign-off?</u>

Future of Programme

Do you have any suggestions of how the programme might be <u>improved</u>?

Would you <u>recommend</u> the multi-sector programme? <u>Who</u> do you think it is most suited to?

Any other comments?

Appendix 3 – Education and Training Leads Endpoint Question Schedule

<u>Training Programme Experiences</u>
If we begin by going around the group, could people just **introduce themselves and their role** in relation to the multi-sector pharmacy programme?

What has been your **general view** of the multi-sector programme this year?

Feedback from trainees has demonstrated a **variety of experiences**. Do you have any suggestions of how we ensure **greater consistency** across trainees' experiences?

<u>Structure/model?</u>
What is your view on the two **models** that were piloted this year?

What is your view on the potential to have the one model (3x4month) rolled out across Wales in the **future**?

Do you feel there is scope for a **weighted model**? (trainees spend more time in a preferred setting)

<u>Learning Outcomes</u>
What is your view of the **learning outcomes**? (e.g. number of outcomes, relevance to sectors)

Is there scope to **review** these? In what way?

<u>Preparedness for practice</u>
To what extent do you feel the multi-sector programme **prepares pharmacists for practice**?

What do you feel the programme **most** prepares pharmacists for?

What do you feel the programme **least** prepares pharmacists for?

<u>Looking to the Future</u>
Do you think more upfront **training should be provided to supervisors**? In particular around the e-portfolio and course components (SLEs, learning outcomes).

Multisector training seems to be **suited to some** individuals more than others, perhaps because it is faster-paced, higher pressured. If this programme becomes compulsory, what do you see as the implications for undergraduates?

There remains a lack of **awareness among employers**, do you have any suggestions of how recognition of the multi-sector programme can be increased?

Evaluation Objectives

To seek the views of trainees on both <u>models</u>, and their education supervisors on the <u>feasibility</u> of achieving the curriculum <u>outcomes</u> and on how well trainees are <u>prepared for practice</u>

To <u>compare</u> findings from the two models, identifying whether one structure is <u>preferable</u> to another and/or <u>better facilitates</u> <u>achievement</u> of intended outcomes

Methods

	Phase 1	Phase 2
Timepoint	Approx. midway through programme	Approx. end of programme
Method	Virtual focus groups One-to-one interviews	Virtual focus groups One-to-one interviews
Participants	Trainees Educational supervisors	Trainees Educational supervisors Education and training leads

Results

Trainees

14 at midpoint
5 at endpoint

Supervisors

14 at midpoint
9 at endpoint

E&T Leads

5 at endpoint

Results

Participant	Midpoint Data Collection		Endpoint Data Collection	
	NW	Swansea	NW	Swansea
Trainee	8	6	3	2
Hospital ES	3	1	1	0
Primary Care ES	3	3	3	2
Community ES	4	0	3	0
E&T Leads	-	-	3	2
Total	18	10	13	6

Total Conversation Time:
14hrs 28mins

General Experiences

Key finding was that very few reports were unanimous – participants had very different experiences – influenced by sector, site and supervisor support

Overall experiences were mixed both within and across trainee groups

Pandemic had significant impact - though not always for the worse

Main Positives

- Overview of pharmacy as a **whole** and links between sectors
- Trainees became **versatile**, **resilient** and **adaptable** through training
- **Support** from HEIW and support staff
- **Supervisors learnt** a lot

Main Negatives

- **High variability** in experiences
- High number and rigid **learning outcomes**
- **Primary care** experience (though positive for some)
- **Pilot-related** issues – organisation

Programme Structure

2(3x2-months)

✓ Exposure to all settings before applying for jobs

✓ Good to come back and apply new experiences

× But pressure to complete learning outcomes in second rotation

✓ Some were initially worried about returning to sector but seemed to *"flow well"*

× High pressure and intensity - difficult for people who were already feeling overwhelmed

✓ But intensity builds resilience and soft skills

3x4-months

✓ Able to immerse yourself into each sector and get competent and signed off at end of rotation

✓ Better able to build relationships with team

× Can't go back and see what you've learnt

× Difficult to ascertain suitable order of sector rotations

✓ Benefits the workplace (logistics)

Learning Outcomes

Trainee Perspectives (and echoed by Supervisors)

o Too many learning outcomes, particularly in primary care:

It wasn't an equal split. I found secondary care the easiest to be signed off in. The check list was a lot smaller than the primary care. (NW Trainee, Endpoint)

o Too sector specific – *"would be better if it was more integrated"*

If you've done loads of one thing why would you be stressing about it somewhere else and planning to do more again? I felt competent in these things but I hadn't ticked it off in primary care (NW Trainee, Endpoint)

o Impacted by pandemic and changes in services – limited exposure

Learning Outcomes

E&T Leads' Perspectives

○ E&T leads also felt the number of LOs in primary care was *"quite overwhelming"*

○ They felt that trainees were following a checklist rather than *"immerse[ing] themselves in the experience"*

> *I just wonder if we're losing a little bit of people just learning stuff through doing, rather than trying to orchestrate and put them in a particular area, and they're coming at it from, 'oh at least this will allow me to tick the box', rather than gain a rounded picture* (E&T Lead, Endpoint)

Trainee Support from Supervisors

o Mixed experiences – *"blind leading the blind"*, *"very on the ball"*, *"very helpful"*
   Different in every setting and probably different between every pre-reg. (Swansea Trainee, Endpoint)

o Supervisors had big impact of overall experience
   I had a really good primary care experience and I would put that largely down to the tutor I had, but then I know somebody else who was on the multi-sector who was in the different surgery and they had a really difficult time (Swansea Trainee, Endpoint)

o Availability of supervisors was important:
   Both in the primary care and community placements, you're with your tutor all day, every day. So, you feel like if you have any issues, they're right there to help you (NW Trainee, Midpoint)

   Hospital could be a little bit more difficult. Your supervisor is quite busy (NW Trainee, Endpoint)

Other Support for Trainees

o Regional Leads from HEIW were also a valuable support and both trainees and supervisors appreciated their quick responses

> *Our Regional Lead was <u>really helpful throughout</u> it all. They were always available to talk to and ask any questions, and even like the shared inbox, if you sent something in you would usually get a <u>reply quite quickly</u>. So I would say they were really good to go to if you had any questions.* (Swansea Trainee, Endpoint)

o Wider healthcare team were more supportive in some settings than others. Often lack of awareness of role in PC settings

Readiness of Supervisors and E&T Leads

○ E&T Leads and many supervisors felt unprepared for the 2020/21 cohort

It doesn't surprise me that with some of the supervisors it was like the blind leading the blind because the Handbook, the curriculum itself, was only given a week before the placement started. That really doesn't give you enough time to digest a brand new curriculum

The training for designated supervisors… wasn't maybe as robust as it could have potentially been without the pandemic situation. Lots of the training was online, a forum where it's probably quite difficult to gauge and understand and for people to ask questions.

The pandemic did have a big impact, not just in what the trainees were able to do, but also in our capacity to plan and prepare because the pandemic hit in March and the trainees started in August and I remember in that timeframe being invited to loads and loads of different meetings and training, so I missed lots of things because there was so much else going on. So, I felt… I came into it really unprepared.

Trainees' Preparedness for Practice

Trainee Perspectives

I feel like my <u>exposure to the three sectors</u> has really <u>given me a boost</u> to what would I expect when I start working and who to contact if I needed help. (NW Trainee, Endpoint)

I think it goes without saying that <u>I would be more prepared for hospital if I'd done a full hospital</u> placement, but I think I've had a decent amount of experience. <u>I've got like a baseline</u> but I definitely <u>don't feel 100% confident</u> to go in as a Day 1 pharmacist and to do the job, but obviously we're going to get training and things like that. (NW Trainee, Endpoint)

I think <u>four months is only just enough time</u> … to get <u>competent in that setting but not necessarily the sector itself</u>. (Swansea Trainee, Endpoint)

o But limited by time of data collection – need time to reflect in practice

Trainees' Preparedness for Practice

Supervisors' and E&T Leads Perspectives

o Supervisors and E&T leads felt qualified pharmacists would need additional support

I do not think 4 months in Community Pharmacy is long enough for a trainee to get a full experience and become competent in all we are expected to do. (Community Supervisor, NW, Endpoint)

Because they're not having a prolonged period of time in one area… when they do become qualified, the education and training needs for those NQPs has gone up greatly. So they need a higher level of support when they come in as a newly qualified pharmacist (E&T Lead, Endpoint)

I would imagine that, yes, you're kind of a jack of all trades, master of none and therefore perhaps after some intensive support, hopefully those transferable skills that's you've learnt on the journey might stand you in good stead. (E&T Lead, Endpoint)

Suggestions for Improvements

o More information at start, clear expectations and format of year

o More training (for trainees and supervisors) on the e-portfolio

o Ensuring training sites have sufficient capacity to take on a trainee

I'd hear a lot of, 'I'm sorry, but I really can't do much with you today because I've got some work to do'. It's not their fault but I feel like if you're going to put someone in a placement you need to make sure that that place has the <u>capacity to take on a pre-reg</u>. (NW Trainee, Endpoint)

o Condensed, integrated learning outcomes with greater flexibility in how they can be demonstrated

I looked at the GPhC performance standards - obviously we don't go off those but our learning outcomes are mapped to those... we have <u>105 this year</u> that we have to meet <u>whereas there's 72 performance outcomes</u> which are designed in such a way that they can be applied to any sector... (NW Trainee, Endpoint)

There needs to be the <u>flexibility in the activity</u> that's linked to the learning outcome, because it's great to have an example... but if that does make your supervisor think there's a <u>better way of showing that learning outcome,</u> then I think that should be an option (E&T Lead, Endpoint)

Who is Suited to Multi-Sector Training?

o Trainees and supervisors would recommend the programme but thought it
suited certain individuals:

*I would definitely recommend it. I think I would recommend it more to people who don't
mind the adaptability side of it and who are willing to actually want to experience the
different sectors* (NW Trainee, Endpoint)

*I would recommend it... I think it's just a faster pace. It felt like I was doing a lot more
evidencing just to be able to show competency in every sector. So, I would say you have
to be organised and adaptable.* (Swansea Trainee, Endpoint)

*I worry that it's not for everybody. I think that some students would struggle with this
model of having to effectively start a new job every four months [...] I think it does take
a certain type of student to be able to really perform well on this programme.* (PC
Supervisor, Swansea, Endpoint)

Looking to the Future

o E&T Leads highlighted how the year had been a learning curve and placed them in a better position for this year (2021/22)

It was definitely a <u>big learning curve</u> and it's been so much easier this year. We know the supervisors roughly <u>know what they're doing</u>, the workplaces <u>know what to expect</u> from a trainee, the other healthcare professionals know what they are and what they do and <u>why they're there</u>. (E&T Lead, Endpoint)

I think we've learnt an awful lot as a department about how this sort of programme can run. I felt that <u>we were a bit haphazard last year</u>. Covid obviously didn't help. I think the relevant parties within the department have got <u>a better understanding of what's being asked of them</u> and I feel that the trainee pharmacists seem to be better prepared. (E&T Lead, Endpoint)

Looking to the Future

○ Yet to see positive impact on employers and service provision – not yet
   a return on investment

> *We've seen an increase in intensity in the training and education burden, but we've lost a workforce. So, we <u>no longer have return on investment for these trainees</u>.* (E&T Lead, Endpoint)

○ A lack of recognition of multi-sector training remains among employers

> *In my experience, applying for hospital jobs it <u>didn't seem as though the multi-sector thing really stood out or mattered</u> because I didn't get many invites back for interviews and things, but that could be my application. … <u>You don't hear much of it</u> …it is only really Wales that's doing this at the moment.* (NW Trainee, Endpoint)

Summary and Points to Consider

- Experiences vary across sectors and training sites

- Pros and cons to both models and further complicated by importance of rotation order

- Scope to condense the learning outcomes with increased flexibility and integration

- Trainees had mixed experience of supervisor support

- The impact of the pandemic was significant and often meant reduced services and exposure for trainees as well as reduced capacity for supervisors to prepare

- Not suited to everyone – fast pace and high intensity – important in context of nationwide rollout

- Perception of lack of return on investment for employers; need for greater awareness among employers

- Mixed views in sense of preparedness for practice - sense that NQPs would require additional support early on (but limited by time of data collection)

Next Steps

o Final report will be circulated in early February

o Next steps for evaluation of multi-sector programme are currently in discussion

o Need for a longitudinal aspect in line with changing pharmacy standards

o How multi-sector Foundation training ensures pharmacists are IP-ready

o What does a day one prescriber look like?

Any questions?

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