

# Health Education England

Evaluating Health Education England's Undergraduate Pharmacist Clinical Placement Pilots (2021 – 22) Final Report

In conjunction with Dr Katie Webb, Cardiff University School of Medicine

25<sup>th</sup> October 2023

# Executive Summary

RSM UK Consulting LLP (RSM) and Dr Katie Webb at the School of Medicine at Cardiff University were commissioned by Health Education England (HEE) in August 2022 to carry out an evaluation of Health Education England's Undergraduate Pharmacists Clinical Placement Pilots (2021-22).

## Background and scope

HEE provided funding to 21 Higher Education Institutes (HEIs) and placement partners in the 2021-22 financial year to design and deliver pilot placements for MPharm Undergraduate Pharmacists. The aim of the pilot programme was to enable the delivery of additional clinical placement hours for MPharm Undergraduate Pharmacist cohorts in England, including supporting the development of new models of clinical placement. The pilot placement was a response to the new UK Standards for the Initial Education and Training of Pharmacists (IETPs) for pharmacists and the recognition of the need for undergraduate training to include more exposure to patients and the wider variety of clinical settings.<sup>1</sup>

The primary purpose of this evaluation is to understand the impact and effectiveness of the pilot placement programme. The outcomes of the evaluation will inform future decisions and support the expansion of placements going forward. The evaluation considered the following themes:

- the aims and objectives of the placement pilots;
- the resources and infrastructure that was provided to Undergraduate Pharmacists;
- Undergraduate Pharmacists' experience of professional activity;
- impact on skills and knowledge of pharmacy undergraduates;
- Undergraduate Pharmacists' educational supervision; and
- how HEIs quality assured placements.

---

<sup>1</sup> The General Pharmaceutical Council (2021): New standards for the initial education and training of pharmacists

## Our approach

A mixed-methods approach was adopted for the evaluation, combining both qualitative and quantitative research methods. The methods employed included:

- A **desk review** of existing documents related to the pilot programme, to understand the aims and objectives of placements, alongside wider literature related to pharmacy training policy.
- 15 **interviews with Higher Education Institutes (HEIs)** were conducted to explore the design, implementation, impact on Undergraduate Pharmacists, successes and challenges of the pilot programme.
- An **online survey of Undergraduate Pharmacists** (n=55) was undertaken to understand the experience of Undergraduate Pharmacists involved in placement pilots (including skills and knowledge gained, perceptions of supervision and available resources, level of patient contact etc).
- An **online survey of Education and Practice Supervisors** (n=31) was undertaken to understand the perceptions and experiences of those providing supervision (including assessment of skills, learning outcomes, and comparison with previous placement opportunities).
- Three **interviews with employers** involved in the provision of clinical placements as part of pilots were undertaken to explore their understanding and perceptions of the pilot placements including professional activity, impacts on employers, successes and challenges.

These activities were triangulated, thematically analysed and used to generate conclusions and areas for future consideration.

## Key findings

Findings from the evaluation have been summarised against the evaluation themes below:

### HEIs

- **Student experience:** Overall HEIs felt that the pilot placement programme **worked well** and provided Undergraduate Pharmacists with a **broader range** of placement experiences.
- **Information and guidance:** HEIs felt that creating **tools for sharing good practice** to support consistency in training levels and experiences for Undergraduate Pharmacists would be beneficial for future placements. Furthermore, the **development of guidance tools** to support the supervising of Undergraduate Pharmacists would be helpful.
- **Programme structure:** There was **significant variation** in placement design and delivery models between HEIs as part of the pilot programme, with **most creating new placement models, but some scaling up or adapting existing models.**
- **Scheduling and planning:** If additional expansion pilots were planned for the future,, **scheduling pilots in an academic year in advance** would allow for HEIs to integrate it into school timetables better and enable development of more complex placement plans.
- **Engagement amongst HEIs:** HEIs felt that there was an opportunity to **build relationships with HEE and between HEIs** to support more collaborative working and knowledge sharing as part of the future development of clinical placements.
- **Funding:** HEIs felt that **reviewing placement tariff levels** could support the implementation and rollout of setting up a more diverse range of placement sites.

### Undergraduate pharmacists

- **Student experience:** Undergraduate Pharmacists described **positive experiences** of participating in the pilot programme with good levels of educational supervision, participatory activities and development of skills and knowledge.
- **Programme structure:** Undergraduate Pharmacists would have liked **longer placements** to embed and further enhance the skills and experience gained from them.

## Education and practice supervisors

- **Student experience:** Education and Practice Supervisors felt that the pilot programme **has enhanced Undergraduate Pharmacists' experience of interacting with patients** and meets the training needs of Undergraduate Pharmacists.
- **Student experience:** Some Education and Practice Supervisors felt that they had **insufficient time, resources and capacity to support Undergraduate Pharmacists** during their pilot placement to effectively observe and supervise Undergraduate Pharmacists.
- **Programme structure:** When considering how the pilot programme compared to previous placement programmes, Education and Practice Supervisors cited the **length of placements and independence of Undergraduate Pharmacists as positive** changes. Evidence shows that longer clinical and workplace placements are generally more effective as they allow better integration into teams, more time to approach and learn complex activities, and the gradual adoption of less supervision over these activities<sup>2</sup>.

## Employers


- **Student experience:** Employers felt that Undergraduate Pharmacists gained a broad range of placement experiences that enhanced their skills.
- **Programme structure:** Employers felt that **longer pilot placements** for Undergraduate Pharmacists enhanced opportunities for them to further the development of Undergraduate Pharmacists over time.
- **Information and guidance:** To support the expansion of placements going forward, employers felt that **more guidance** on the level of feedback required and skill levels of Undergraduate Pharmacists would be helpful.

## Conclusions

Based on the findings summarised above, and with reference to the core objectives of the pilot programme and research themes for the evaluation described in Section 1, the following conclusions have been made:

Figure 1: Conclusions

---

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>Broadly, HEIs, employers and education and training supervisors reported that placements <b>achieved most of the outcomes and impacts identified in the evaluation logic model</b> (see Section 3.1.8), most notably:</p> <ul style="list-style-type: none"><li>• <b>improved support and practical experience</b> for Undergraduate Pharmacists;</li></ul> |
| <b>Aims and objectives of the placement pilots</b>                                  |                                                                                                                                                                                                                                                                                                                                                                |

---

<sup>2</sup> Gonzalez-Garca et al, 2021. The relationship between clinical placement duration and students' satisfaction with the quality of supervision and learning environment: A mediation analysis. *Nursing and Health Sciences*, 23(3):688-697.

- **improved infrastructure and capacity** for clinical placements;
- **testing a range of innovative placement models**; and
- **bridging the gap between the skills of Undergraduate Pharmacists and those of qualified pharmacists.**

There are some outcomes and impacts that have not yet been fully achieved, most notably the standardisation of placements. Additionally, some of the longer-term impacts identified in the logic model cannot yet be fully tested (e.g. cultural changes within the sector). Due to sampling issues, it is not possible to assess if the programme represents both the seven NHS regions and a cross section of rural, urban and mixed environments.



**Student experience of professional activity and impact upon skills and knowledge**

The pilot placement programme provided Undergraduate Pharmacists with a **greater understanding of different pharmacy settings and provided them with a broad range of placement experiences.** The programme **improved the skills, knowledge and experiences of professional activities** for Undergraduate Pharmacists through participatory placements and conducting activities such as patient histories and taking blood pressure.



**Programme structure and the resources and infrastructure provided to Undergraduate Pharmacists**

Programme structures and placement models **varied across all HEIs**, with both new and existing providers and models included. **Largely, placement models were felt to be well-structured but educational supervision varied across these models.** The resources and infrastructure provided to Undergraduate Pharmacists to support their placements was partially **viewed to be sufficient and appropriate**, with some exceptions amongst education and practice supervisors.



**Educational supervision and quality assurance of placements**

The extent to which placements were quality assured, and the method of quality assurance, **varied significantly** by placement model. HEIs and employers felt that **creating guidance tools would support the standardisation of placements** (including quality assurance, feedback for Undergraduate Pharmacists and structure of placements) and quality of Undergraduate Pharmacist training. HEIs felt this could be

---

supported by the creation of a repository of case studies.

---



### **Developing and testing a range of innovative placement models**

A variety of placement models and delivery methods were tested as part of the programme. Feedback from HEIs and employers on the relative success of different placement models was limited. Communication and reporting functions between HEE and employers could be **further developed and enhanced to share knowledge, publicise good practice and promote collaboration** between placement models and education providers.

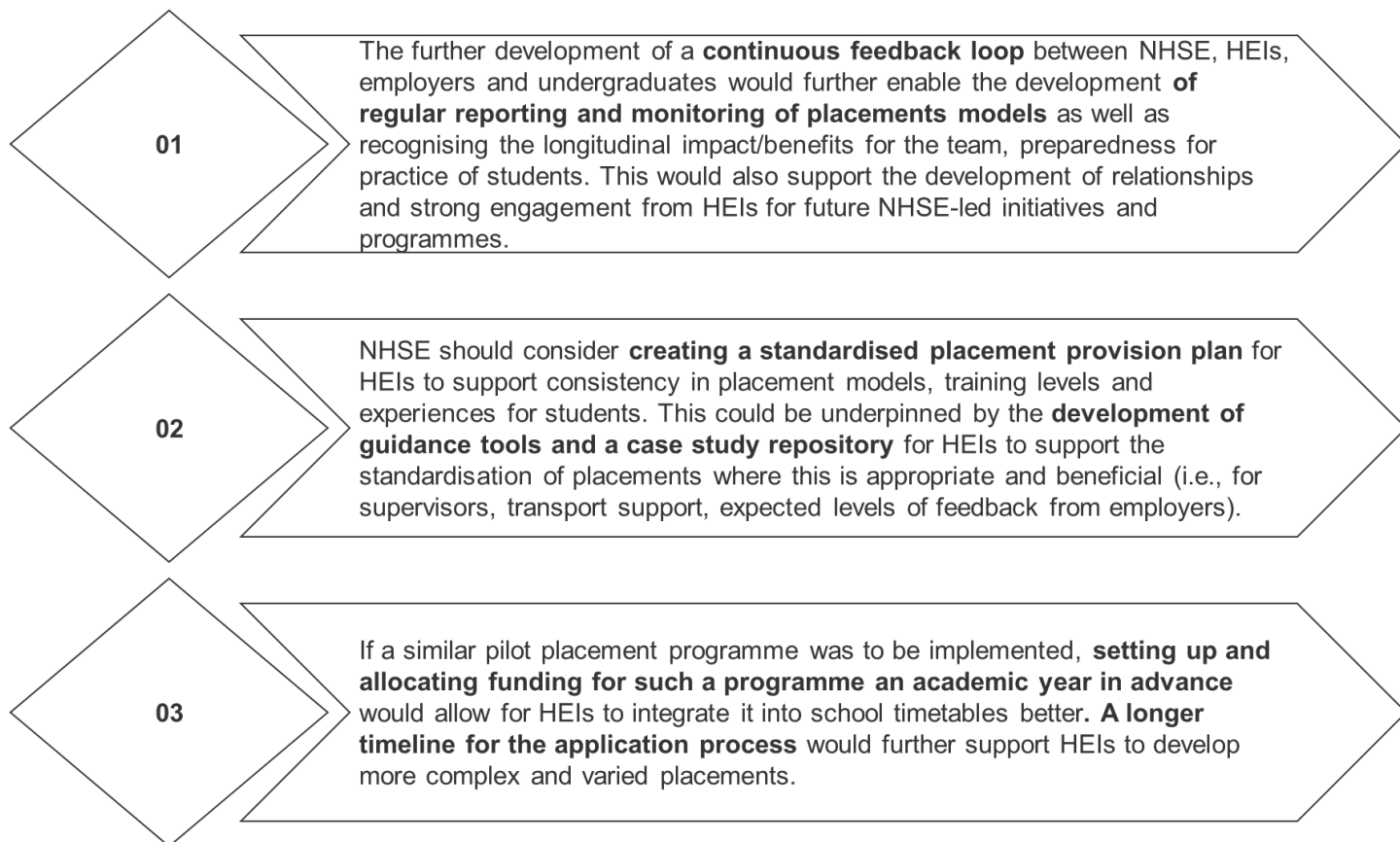
HEIs felt that the pilot placement funding application process could be improved through **allowing more time to submit applications. This could include more advanced notice of implementation timeframes** and ensuring HEIs are aware one academic year in advance to allow for timetable amendments. This would allow for **further development and testing of placement models** to ensure they are of a high quality.

---

### **Considerations for the future**

From these conclusions, we have proposed the following considerations for NHS England Workforce, Training and Education (recognising that HEE has now transitioned to be part of NHS England) for ongoing rollout and implementation of clinical placements:

Figure 2: Future considerations





# Contents

|    |                                   |    |
|----|-----------------------------------|----|
| 1. | Introduction and background ..... | 11 |
| 2. | Method.....                       | 12 |
| 3. | Desk review.....                  | 15 |
| 4. | Survey findings.....              | 27 |
| 5. | Interview findings .....          | 42 |
| 6. | Discussion .....                  | 53 |
| 7. | Conclusions.....                  | 57 |
| 8. | Annex.....                        | 60 |

## Glossary

| <b>Acronym</b> | <b>Description</b>                                                 |
|----------------|--------------------------------------------------------------------|
| EPA            | Entrustable Professional Activities                                |
| GPhC           | General Pharmaceutical Council                                     |
| GP             | General Practice                                                   |
| HEE            | Health Education England                                           |
| HEI            | Higher Education Institute                                         |
| ICS            | Integrated Care System                                             |
| IETPs          | UK Standards for the Initial Education and Training of Pharmacists |
| LTP            | NHS Long Term Plan                                                 |
| MDT            | Multi-disciplinary Team                                            |
| NHSE           | NHS England                                                        |
| PIM            | Project Initiation Meeting                                         |
| RSM            | RSM UK Consulting LLP                                              |
| OSCE           | Objective Structured Clinical Examination                          |

# 1. Introduction and background

RSM UK Consulting LLP (RSM) and Dr Katie Webb at the School of Medicine at Cardiff University was appointed by Health Education England (HEE) to carry out an evaluation of Health Education England's Undergraduate Pharmacists Clinical Placement Pilots (2021-22).

## 1.1 Background

HEE provided funding to 21 Higher Education Institutes (HEIs) and placement partners in the 2021-22 financial year. The aim of the pilot programme was to enable the delivery of additional clinical placement hours for MPharm Undergraduate Pharmacist cohorts in England, including supporting the development of new models of clinical placement. The pilot placement was a response to UK Standards for the Initial Education and Training of Pharmacists (IETPs) and the recognition of the need for undergraduate training to include more exposure to patients and the wider variety of clinical settings.

The pilot programme had the following objectives:

- to develop an evidence base to support and drive development of a consistent (England) quality benchmark for Undergraduate Pharmacist clinical placement programmes in England;
- to test a range of innovative approaches to teaching, placement delivery, supervision, and infrastructure; and
- to represent both the seven NHS regions and a cross section of rural, urban and mixed environments.

## 1.2 Purpose of this research

The primary purpose of this assignment is to evaluate the Undergraduate Pharmacists Clinical Placement Pilots (2021-22). The outcomes of the evaluation will inform future decisions and guide project development.

The agreed specification for this research described the core themes for assessing the effectiveness of the pilot placement programme has been through considering:

- the aims and objectives of the placement pilots;
- the resources and infrastructure that was provided to Undergraduate Pharmacists;
- Undergraduate Pharmacists experience of professional activity;
- impact on skills and knowledge of pharmacy undergraduates;
- Undergraduate Pharmacists' educational supervision; and
- how HEIs quality assured placements.

## 2. Method

This section summarises the approach taken to the project including any amendments made following our Project Initiation Meeting (PIM) on 8<sup>th</sup> August 2022 and during subsequent stages.

### 2.1 Project inception and planning

We held a virtual project initiation meeting with the Project Board on 8<sup>th</sup> August 2022. Within the meeting agreement was made on the approach and project plan; project management arrangements; stakeholder communications and engagement plan (including engagement with participant HEIs); reporting plan; risk management; and access to relevant data/ stakeholder information.

### 2.2 Stakeholder and audience mapping

We developed a stakeholder communications and engagement plan during the inception stage, which identified stakeholders and the most appropriate way of engaging with them. Stakeholders included participating HEIs, Undergraduate Pharmacists, foundation pharmacists, Education and Practice Supervisors and employers in Secondary Care, Primary Care networks and Community Pharmacy in England (participating in these pilots).

For each stakeholder group we considered possible areas of interest, concern or support; geographical area/ HEE region; timing of engagement; their level of influence over the policy and practice; and relevant data.

### 2.3 Desk review

A desk review was conducted of existing documents related to the pilot programme, to understand the aims and objectives of placements, alongside wider literature related to pharmacy training policy, NHS policy and evidence from comparable training programmes across relevant sectors (e.g. nursing). We also conducted a review of feedback forms from HEIs exploring the models of training placement delivery and funding at individual HEIs. An inventory of all documents reviewed is available in Annex 1.

### 2.4 HEI MS Teams (online) interviews

One-to one interviews were undertaken with 15 HEIs involved in the pilot programme. The purpose of these interviews was to understand the resources provided to Undergraduate Pharmacists, HEI perceptions of learning outcomes and professional activity, and quality assurance procedures. These interviews also explored the counterfactual (e.g. what may have happened in the absence of these placements) as well as comparisons with previous placements. These interviews took place between October 2022 and November 2022. The topic guide used for these interviews can be found in Annex 2.

### 2.5 Undergraduate Pharmacists survey

An online survey of Undergraduate Pharmacists was undertaken to understand the experience of Undergraduate Pharmacists involved in placement pilots (including skills

and knowledge gained, perceptions of supervision and available resources, level of patient contact etc). The survey was open for responses between 4<sup>th</sup> January 2023 and 6<sup>th</sup> March 2023, including an extension period. The survey received 55 responses. Invitations were circulated by HEIs with three reminders sent out to potential participating Undergraduate Pharmacists. The survey questionnaire can be found in Annex 3.

## 2.6 Education and Practice Supervisors survey

An online survey of Education and Practice Supervisors was undertaken to understand the perceptions and experiences of those providing supervision (including assessment of skills, learning outcomes, and comparison with previous placement opportunities). The survey was open between 26<sup>th</sup> January 2023 and 6<sup>th</sup> March 2023 including an extension period. The survey received 31 responses. Initial invitations were circulated by HEIs, and two follow-up reminders were sent to potential participating Education and Practice Supervisors. The survey questionnaire can be found in Annex 4.

## 2.7 Interim report

An interim report was produced on 14<sup>th</sup> March 2023 on the emerging findings of the research activities and was used to inform the future planned research activities of the evaluation.

## 2.8 Employer MS Teams (online) interviews

One- to- one interviews with three employers involved in the provision of clinical placements as part of pilots were conducted to understand the perceptions of the pilot placements (including professional activity, impacts on employers and exploration of the counterfactual). We had hoped to interview 10 employers, as part of the evaluation but were unable to recruit within the timeframe of the evaluation despite different approaches taken. These interviews took place between April and June 2023. The topic guide for these interviews can be found in Annex 5.

## 2.9 Follow-on focus groups with Undergraduate Pharmacists

We had hoped to hold four focus groups with Undergraduate Pharmacists, but it was not possible to recruit Undergraduate Pharmacists within the evaluation timeline. We tried to recruit through HEIs directly and contacting those Undergraduate Pharmacists who responded to the survey.

## 2.10 Analysis and final reporting

The findings from the desk review, interviews and surveys described above were thematically analysed and triangulated against the original scope and research themes outlined in Section 1.

Emerging findings were presented at a workshop with our advisor and HEE on 21<sup>st</sup> June 2023 to analyse and interpret results and provide feedback on the emerging conclusions.

The table below outlines how each of the methods employed as part of the evaluation addresses the evaluation requirements:

Table 1: Evaluation stages mapped against evaluation requirements

| <b>Evaluation themes</b>            | <b>Desk review of pilot literature</b> | <b>HEI MS Teams (online) interviews</b> | <b>Undergraduate Pharmacist survey</b> | <b>Education and Practice Supervisors survey</b> | <b>Employer MS Teams (online) interviews</b> |
|-------------------------------------|----------------------------------------|-----------------------------------------|----------------------------------------|--------------------------------------------------|----------------------------------------------|
| Analysis of the aims and objectives | ✓                                      | ✓                                       | ✓                                      | ✓                                                | ✓                                            |
| Resources and infrastructure        | ✓                                      | ✓                                       | ✓                                      | ✓                                                | ✓                                            |
| Professional activity               |                                        | ✓                                       | ✓                                      | ✓                                                | ✓                                            |
| Impact Evaluation                   |                                        | ✓                                       | ✓                                      | ✓                                                | ✓                                            |
| Education supervision               |                                        | ✓                                       |                                        | ✓                                                |                                              |
| Quality Assurance                   | ✓                                      | ✓                                       |                                        |                                                  |                                              |

## 3. Desk review

### 3.1 Introduction and approach

Our initial research included a desk review of relevant documents to gather information and insight into Undergraduate Pharmacists' clinical placements and education as part of this pilot programme. The desk research is focused on addressing the research questions as listed below:

- The aims and objectives of the placement pilots;
- The resources and infrastructure that was provided to Undergraduate Pharmacists;
- Undergraduate Pharmacists experience of professional activity;
- Impact on skills and knowledge of pharmacy undergraduates;
- Undergraduate Pharmacists' educational supervision; and
- How HEIs quality assure placements.

The findings set out in this chapter are based on review of:

- programme literature;
- previous evaluations undertaken;
- academic articles relevant to the theme of this project; and
- data from the HEIs involved in the programme.

This literature was identified for inclusion through submissions from HEE alongside a search protocol (see Annex 1) of available online resources.

#### 3.1.1 Strategic context and background

The NHS Long Term Plan (LTP) suggests that around a third of outpatient hospital appointments will be avoided through digital GP appointments and redesigned hospital support, and pharmacists are allocated a significant role in improving primary care in particular<sup>3</sup>. Subsequently, the NHS People Plan (2020) pledged to create a sustainable supply of prescribing pharmacists with enhanced clinical and consultation skills, with a particular focus on enhancing the role of community provision<sup>4</sup>.

---

<sup>3</sup> NHS (2019). *The NHS Long Term Plan*. <https://www.longtermplan.nhs.uk/wp-content/uploads/2019/01/easy-read-long-term-plan-v2.pdf>

<sup>4</sup> National Pharmacy Association (2020). *Response to NHS People Plan*. <https://www.npa.co.uk/news-and-events/news-item/national-pharmacy-association-responds-to-nhs-people-plan/>

Following on from this, the General Pharmaceutical Council (GPhC) initiated the review and reform of the initial education and training of pharmacists, producing the new 'Standards for the initial education and training of pharmacists'<sup>5</sup> in January 2021. These standards and associated learning outcomes describe the knowledge, skills, understanding, and professional behaviours that a trainee pharmacist must display to pass their initial education and training. The primary aims of these standards are displayed in the table below:

Table 2: The aims of the new Standards for the initial education and training of pharmacists

| <b>Aims of the new Standards for the initial education and training of pharmacists</b> |                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                                                      | To develop pharmacists that can be more adaptable within their work.                                                                                                                                                        |
| 2                                                                                      | Placing an emphasis on creating confident pharmacists that are capable of operating within a variety of healthcare settings.                                                                                                |
| 3                                                                                      | To ensure trainees are dedicated to person centred care and are proficient prescribers.                                                                                                                                     |
| 4                                                                                      | To allow trainees to play a much greater role in providing clinical care to patients and the public from their first day on the register.                                                                                   |
| 5                                                                                      | To produce adaptable pharmacist professionals who will be confident and capable of operating in multi-professional teams across a variety of healthcare settings, to meet diverse and changing patient needs <sup>6</sup> . |

Source: The General Pharmaceutical Council (2021): New standards for the initial education and training of pharmacists<sup>7</sup>

Exploring the need for this change to the assessment strategy used for trainee and student pharmacists, the GPhC (2021) 'Reforms to the Education and Training of Pharmacists: Core Narrative'<sup>8</sup>, discusses the significant evolution of pharmacists' roles, stating that there is a growing demand within the NHS for clinical, patient-facing, accountable pharmacist practitioners across all sectors. These new standards also set out desired learning outcomes for trainee pharmacists. Within the document a competence and assessment hierarchy is applied, known as the Miller's Triangle. The Miller's Triangle develops a four-tiered system to aid with the implementation of learning objectives, creating a 'knows, knows how, shows how, does' system.

To support the development of clinical placements within the MPharm, and the implementation of IETP more broadly, HEE started work to secure access to Department of Health and Social Care (DHSC) Clinical Tariff for clinical placements. Previously, Undergraduate Pharmacists enrolled on MPharm degree courses were not eligible for clinical placement funding through this route. HEE also made the decision to fund pilots of

<sup>5</sup> The General Pharmaceutical Council (2021): New standards for the initial education and training of pharmacists

<sup>6</sup> The General Pharmaceutical Council (2021): FAQ: reforms to the initial education and training of pharmacists

<sup>7</sup> The General Pharmaceutical Council (2021): New standards for the initial education and training of pharmacists

<sup>8</sup> The General Pharmaceutical Council (2021): Reforms to the Education and Training of Pharmacists Core Narrative



clinical placements to support HEIs to develop innovative models of clinical placement and new capacity in preparation for anticipated access to DHSC clinical tariff funding.

As these pilots progressed and completed, DHSC confirmed the addition of Undergraduate Pharmacists to the list of professions eligible for education and training tariff funding from September 2022. This means that HEIs are now able to design and deliver clinical placements within the MPharm degree that are supported by clinical tariff payment.

Therefore, the findings of these pilots are able to directly inform further development of clinical placements for all HEIs as part of the ongoing implementation of IETP reform. Additionally, HEE also developed work to structure the way that Foundation Trainees would be assessed in the foundation training year of the IETP training period.

In order to achieve IETP standards set out by the GPhC, HEE produced the “Trainee pharmacist foundation year assessment strategy” (2021)<sup>9</sup> which describes five groups of assessment activities. These assessment activities are purposefully designed to support the trainee pharmacist to generate evidence against the GPhC learning outcomes, which are organised into four distinct categories:

- person-centred care and collaboration;
- professional practice;
- leadership and management; and
- and education and research.

This is also relevant to the activities that might be undertaken by Undergraduate Pharmacists on clinical placements, as both the MPharm and foundation training year are now working to the same common learning outcomes.

### **3.1.2 Aims and objectives of the placement pilots**

HEE wrote to Heads of Schools of Pharmacy in the HEIs in England in 2021, requesting applications for HEIs to take part in the pilot placement programme. HEE set out the aims of the pilot programme within their Undergraduate Pharmacist Clinical Placement Models briefing notes, which were to:

- map the new Initial Education Training (IETP) standards;
- test the percentage of placement time within year groups – considering what ‘good’ looks like in terms of placement hours versus didactic / simulation teaching;
- develop an evidence base to help determine an appropriate placement model;
- test innovative approaches to teaching, placement delivery, supervision, and infrastructure; and
- model placements that recognise and strengthen the diversity of the pharmacy workforce and the role of the pharmacist where health inequalities persist.

---

<sup>9</sup> Health Education England (2021): Trainee Pharmacist Foundation Year Assessment Strategy

These aims were developed in collaboration between HEE and the Pharmacy Schools Council to test and evidence the scope and content of placements<sup>10</sup>.

Alongside this, placement providers<sup>11</sup> identified the overall aims of their pilot programmes. These aims varied across each provider, and included:

- increasing opportunities to experience work-based practice in community settings;
- increasing understanding of the role of pharmacists as part of a multidisciplinary team;
- exposing trainee pharmacists to an observation placement with a non-medical prescriber, as part of their final year elective studies;
- devising a service level agreement to be used for placement activity, which could be utilised in future for other pharmacy sectors; and
- developing a Clinical Skills Passport, setting out key competencies that must be achieved at the correct level (“shows how” and “does” levels of Miller’s Triangle) which are aligned to the new Initial Education and Training standards.

### 3.1.3 Resources and infrastructure provided to Undergraduate Pharmacists

Educational resources were provided to Undergraduate Pharmacists by HEIs before undertaking placements as well as ongoing support throughout placements. The extent and intensity of the support provided to trainee pharmacists pre-placement varied between different HEIs. These ranged from one-hour online sessions to week-long classroom-based support, using materials such as workbooks and e-learning modules. Once on placements, support provided to trainee pharmacists across the various HEIs was more consistent, with most HEIs providing some form of ongoing supervision and wellbeing support. The support provided by HEIs is presented in the table below, along with support provided by placement providers at the request of HEIs:

Table 3: Resources provided to Undergraduate Pharmacists

| Resources provided by HEI prior to placements                                                                  | Resources provided by placement providers                                                                                                                                                 |
|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre – placement mandatory training sessions covering Entrustable Professional Activities (EPA) and Covid risks | Debriefing calls with support such as a mental health first aider.                                                                                                                        |
| Pre-placement workshops                                                                                        | Longitudinal supervision: designated clinical supervisors, which were available to Undergraduate Pharmacists throughout the course of their placements to provide educational continuity. |
| Workbooks detailing placement activities and specified aims of the placements                                  |                                                                                                                                                                                           |
| Teaching modules uploaded to E-learning sites                                                                  |                                                                                                                                                                                           |

Source: Health Education England Undergraduate Pharmacists’ clinical placement pilots (2021-22) School of Pharmacy Report<sup>12</sup>

<sup>10</sup> Health Education England (2021): Undergraduate Pharmacist Clinical Placement Models – Briefing note

<sup>11</sup> Health Education England (2022): HEE’s Undergraduate Pharmacists’ clinical placement pilots (2021-22) School of Pharmacy report

<sup>12</sup> Health Education England (2022): HEE’s Undergraduate Pharmacists’ clinical placement pilots (2021-22) School of Pharmacy report

HEIs reported that the use of these resources led to positive impacts such as:

- improved confidence amongst Undergraduate Pharmacists;
- consistency across all placement providers;
- ability to better organise and manage the placement scheme;
- conducting MPharm student performance reviews; and
- delivering feedback.

Some HEIs mentioned resources were newly created for this scheme, one HEI mentioned 'This was a new elective that hadn't been run before, so all the resources were newly designed to align with the elective and pilot.'<sup>13</sup> However, some providers repurposed their current resources, using previous logbooks as templates. One HEI reflected that 'the resources used for the community pharmacy placements were repurposed to meet the new requirements for placements for clinical tariff'. Of the HEIs (14 out of 17) that updated their initial resources, some highlighted reasons such as designing placement materials to meet the needs of new placement sites as "the majority of the simulations [for logbooks] were newly designed in order to prepare the students for the specific settings and enhanced tasks required of them." However, some HEIs indicated that updating resources and the infrastructure plans were of less importance during the pilot programme, due to their perception that the programme was not continuing<sup>14</sup>.

### 3.1.4 Student experience of professional activity

One mechanism that has been developed in a range of professions and countries for embedding professional activities in clinical placements are Entrustable Professional Activities (EPAs). An American post-registration study by Haines et al. (2018), *Validation of the entrustable professional activities for new pharmacy graduates*<sup>15</sup> found that EPAs helped to enhance pharmacy practice experience. Survey participants consistently agreed that the 15 EPA statements for new pharmacy graduates describe activities that are pertinent to pharmacy practice. A consistent level of agreement was observed regardless of the survey participant's employment with a college or school, board certification status, or completion of postgraduate training.

Working with the Pharmacy School's Council, HEE have commissioned a project to investigate and identify appropriate EPAs for use in pharmacy undergraduate placements. These have now been published<sup>16</sup>.

The results from HEE's Undergraduate Pharmacists' clinical placement pilots (2021-22) site reports correlate with these findings. Most HEIs (14 out of 17) reported that the placement model had increased the skills and knowledge of all pharmacy undergraduates, based on feedback from clinical supervisors and Undergraduate Pharmacists, and on the basis that the models used within the placements range from 100% participatory activities

<sup>13</sup> Health Education England (2022): HEE's Undergraduate Pharmacists' clinical placement pilots (2021-22) School of Pharmacy report

<sup>14</sup> Health Education England (2022): HEE's Undergraduate Pharmacists' clinical placement pilots (2021-22) School of Pharmacy report

<sup>15</sup> Haines, S.T., Pittenger, A.L., Gleason, B.L., Medina, M.S. and Neely, S., 2018. Validation of the entrustable professional activities for new pharmacy graduates. *American Journal of Health-System Pharmacy*, 75(23), pp.1922-1929.

<sup>16</sup> NHSE (2023): NHSE & PhSC proposed list of Entrustable Professional Activities. <https://www.hee.nhs.uk/sites/default/files/documents/List%20of%20EPAs%20Final.pdf>

to 100% observational activities, with the majority of placement sites providing both participatory and observational activities. Some sites discussed that due to the nature of the programme introducing Undergraduate Pharmacists to new concepts, that a higher level of observation was needed compared to regular placements to ensure safe and efficient delivery of planned activities<sup>17</sup>

All HEIs reported Undergraduate Pharmacists had direct contact with patients, but levels varied across placement providers due to Covid-19 with many patient consultations being undertaken by telephone. *"Some students were not able to have as much face-to-face contact with patients as we would have liked, owing to post covid-19 working patterns, but in these cases were able to speak to patients directly using phone calls."*

During time spent with patients, the majority of HEIs (16 out of 17) stated that Undergraduate Pharmacists were able to perform activities aligned with professional practice. Most HEIs (14 out of 17) also reported that Undergraduate Pharmacists completed a range of tasks that they were able to perform individually. HEIs cited a number of activities that aligned to professional practice and being performed by Undergraduate Pharmacists, these activities varied across placement providers with each site delivering different activities. The following examples were identified by HEIs as part of the activities undertaken as part of the clinical placement pilots:

- Patient observations (e.g. National Early Warning Score (NEWS));
- Review of current and historic patient medications;
- Completing a pharmaceutical care plan;
- Taking blood pressure;
- Attending multi-disciplinary team meetings;
- Dispensary based work; and
- Patient counselling.

However, one pilot site stated that 'Students did not perform any physical clinical skills or core diagnostic skills in this pilot. Some may have observed the non-medical prescriber perform these skills when assessing a patient'<sup>18</sup>.

Linked to this work, HEE has commenced work exploring the use of EPAs in MPharm placements in England, to support the further development of this as a potential tool for embedding professional activities safely and effectively within clinical placements.

### **3.1.5 Trainee pharmacists' educational supervision**

HEIs identified a range of ways in which Undergraduate Pharmacists were supervised across placement providers. The majority of HEIs (nine out of 17) explained that the Undergraduate Pharmacists experienced one-to-one supervision from a dedicated supervisor, with these being either academic staff members from HEIs or clinical supervisors from placement providers. Six out of 17 HEIs reported that Undergraduate Pharmacists were supervised by the lead pharmacist or staff at the placement provider.

<sup>17</sup> Health Education England (2022): HEE's Undergraduate Pharmacists' clinical placement pilots (2021-22) School of Pharmacy report

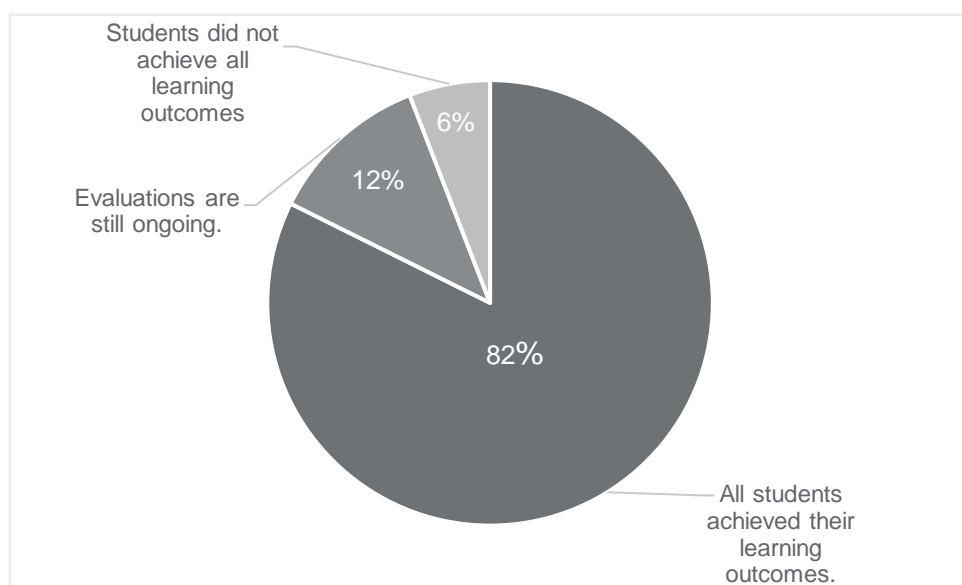
<sup>18</sup> Health Education England (2022): HEE's Undergraduate Pharmacists' clinical placement pilots (2021-22) School of Pharmacy report

Some supervision was delivered remotely via online tools for example through slide decks and video calls or delegated to those working within placements in a small number of examples.

Almost all HEIs (16 out of 17) reported that there was sufficient access to, and capacity of, supervision during the placement. Only one reported that capacity issues caused supervision sessions to be rescheduled.

As shown in the figure below, most HEIs (14 out of 17) also report that all Undergraduate Pharmacists met their learning outcomes, with only one site reporting that learning objectives could only be achieved using simulated sessions run by the placement site. This demonstrates that HEIs thought Undergraduate Pharmacists were well supported and supervised during their placements, with trainee pharmacists going on to achieve their learning objectives as a result of the placement.

Figure 3: Percentage of HEIs that reported Undergraduate Pharmacists meeting all learning outcomes



Source: Health Education England Undergraduate Pharmacists' clinical placement pilots (2021-22) School of Pharmacy report<sup>19</sup>

### 3.1.6 How Higher Education Institutes quality assured placements

HEIs have implemented processes to quality assure the content and supervision of placements, such as:

- training and support for Educational Supervisors around the content and delivery of placements;
- support materials for tutors in each of the sectors; and

<sup>19</sup> Health Education England (2022): HEE's Undergraduate Pharmacists' clinical placement pilots (2021-22) School of Pharmacy report

- online meetings held to discuss realistic expectations and the feasibility of the activities.

To inform future provision of clinical placements and improve the quality assurance of placements, HEIs also collected post programme feedback about quality assurance processes from Undergraduate Pharmacists and tutors as shown in the table below.

Table 4: Post pilot feedback surrounding quality assurance processes

|                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The majority of HEIs (13 out of 17) agreed that the quality assurance process was robust and effective during the pilot.                                                                                                                                                                                                                                                              |
| Some of the HEIs (three out of 17) stated that it was challenging to ensure quality assurance processes within the programme, citing issues such as, <ul style="list-style-type: none"> <li>• the short-term nature of the programme;</li> <li>• the level of funding provided; and</li> <li>• a lack of HEE involvement and guidance.</li> </ul>                                     |
| Some HEIs (two out of 17) have already implemented changes to their quality benchmarking for the future. The areas in which these changes were made included: <ul style="list-style-type: none"> <li>• adjustments to placement plan;</li> <li>• capacity;</li> <li>• competencies;</li> <li>• sign-off;</li> <li>• simulation sessions; and</li> <li>• quality assurance.</li> </ul> |
| Other HEIs (six out of 17) reported they had no need to implement changes to quality benchmarking for the future.                                                                                                                                                                                                                                                                     |
| Six out of 17 HEIs reported they are currently reviewing procedures with full reports to follow.                                                                                                                                                                                                                                                                                      |

Source: Health Education England Undergraduate Pharmacists’ clinical placement pilots (2021-22) School of Pharmacy report<sup>20</sup>

The results show that while the majority of HEIs believed the quality assurance process was robust and effective during the pilot, almost half of the sites propose to implement changes to their quality benchmarking for the future.

The HEIs identified a range of different measures to monitor and assess risk including:

- conducting post programme evaluations (many of which are still ongoing);
- collecting student and provider’s feedback on potential improvements for the future in the form of questionnaires and focus groups;
- weekly monitoring of student progress via portfolio submissions; and

<sup>20</sup> Health Education England (2022): HEE’s Undergraduate Pharmacists’ clinical placement pilots (2021-22) School of Pharmacy report

- issuing a proforma in which Trusts could raise concerns surrounding the progress of student pharmacists.<sup>21</sup>

### **3.1.7 Logic model**

As part of the desk review a logic model was developed, establishing the inputs, activities, outputs, outcomes and impacts of the pilot programme as described below (Annex 6):

---

<sup>21</sup> Health Education England (2022): HEE's Undergraduate Pharmacists' clinical placement pilots (2021-22) School of Pharmacy report

Table 5: Logic model

| Inputs                                                                                                                                                                                                                                                                                                                                                                      | Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Outputs                                                                                                                                                                                                                                                                                                                                                                                                                      | Outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Impacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Identify activities that could be carried out by pharmacy undergraduates while on placement in the pharmacy workplace.</li> <li>• Investment across 21 pilot sites to support the increase and promotion of this clinical placement activity which will be in addition to any placement time currently offered by HEIs.</li> </ul> | <ul style="list-style-type: none"> <li>• Move Undergraduate Pharmacy students from observing tasks, to being entrusted to carry them out with the appropriate level of supervision.</li> <li>• Independent prescribing training in the MPharm leading to developing and implementing this in the foundation programme.</li> <li>• Pilots across 21 HEIs in the delivery of Undergraduate Pharmacist clinical placements.</li> <li>• More participatory placement activities experienced by undergraduate across pilot sites.</li> </ul> | <ul style="list-style-type: none"> <li>• Additional clinical placement hours (either single sector or rotational) for Year 3 and 4 MPharm (undergraduate) pharmacist cohorts in England.</li> <li>• Pilots deliver a variety of clinical placement models.</li> <li>• Continuum of education between the MPharm and the foundation training year.</li> <li>• Evidence gathered on different models and approaches</li> </ul> | <ul style="list-style-type: none"> <li>• Improved support for students to gain practice-based skills effectively during the MPharm, preparing them for their training year.</li> <li>• Enhance undergraduate students' competence and confidence in delivering clinical services/activities and working as part of multi-professional teams.</li> <li>• Reduction in gap of skills and practical experience between MPharm and foundation training year.</li> <li>• Growth in the number of clinical, patient-facing, accountable pharmacist practitioners across all sectors.</li> <li>• Build relationships with stakeholders and potential employers to grow the pharmacy workforce.</li> <li>• Build placement capacity within placement providers in England.</li> </ul> | <ul style="list-style-type: none"> <li>• Compliance with the new learning outcomes set out by the GPhC.</li> <li>• Test a range of innovative approaches to placement delivery, supervision, and infrastructure, developing an evidence base to determine the most effective and appropriate placement models.</li> <li>• Enable cultural change in pharmacy delivery that includes students as part of active clinical team.</li> <li>• Increased clinical placement capacity across sectors within England.</li> <li>• Reduction in variation for student experience in relation to education and training on placement.</li> <li>• Reduction in variation of education and training experience on placement</li> </ul> |





|  |                                                                                                                                                    |                         |                                                                                                                                                    |                                                                                                                                                    |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"><li>• More direct contact for Undergraduate Pharmacists with patients and/or healthcare professionals.</li></ul> | across the pilot sites. | <ul style="list-style-type: none"><li>• Enhancing teaching and feedback skills of the multi-professional team: sharing of best practice.</li></ul> | <ul style="list-style-type: none"><li>• Enhancing teaching and feedback skills of the multi-professional team: sharing of best practice.</li></ul> |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|

### **3.1.8 Other areas of interest**

In addition to the points noted against the key evaluation questions above, the desk review also found one wider outcome, in that all HEIs agreed that establishing these placements has enabled greater collaboration across their region, through:

- expanding current working relationships:
- improving collaborative working between Universities and ICSs;
- recruitment of new providers from within an HEI's ICS and externally; and
- conducting regular meetings with HEIs.

## 4. Survey findings

### 4.1 Introduction

This chapter outlines the findings from two online surveys undertaken with:

- Undergraduate and Trainee Pharmacists; and,
- Education and practice supervisors.

### 4.2 Undergraduate Pharmacists survey

A survey of Undergraduate Pharmacists was conducted between 4<sup>th</sup> January 2023 and 6<sup>th</sup> March 2023. 55 Undergraduate Pharmacists completed the survey to gather their perceptions of the Undergraduate Pharmacists' Clinical Placement Pilots (2021-22). Trainee Pharmacists were Undergraduate Pharmacists at the time they took part in the pilot placement programme and will be referred to as Undergraduate Pharmacists throughout. The survey covered:

- experience with the pilot programmes placement objectives and activities;
- educational supervision received by Undergraduate Pharmacists during the pilot programme; and
- any perceived success and challenges that occurred during the programme.

The questionnaire used for the survey can be found in Annex 3.

#### 4.2.1 Undergraduate Pharmacists demographic profile

It should be noted that the sample for this survey has not been collected in order to make it statistically representative of the wider relevant student population (in terms of academic year, gender, ethnicity, region etc.). Therefore, the findings below cannot be considered representative of the wider student population.

**Academic Year:** 18% of Undergraduate Pharmacists that responded to this survey were in their second academic year at the time of their placement. The majority (62%) were in their third year, while 20% were in Year 4.

**Gender:** The majority (67%) of Undergraduate Pharmacists that responded to the survey identified as female, with 33% identifying as male.

**Ethnicity:** In terms of ethnic background:

- 49% of Undergraduate Pharmacists indicated their ethnic background was White – UK;
- 15% indicated their ethnicity to be Chinese;
- 9% indicated their ethnicity as Indian;
- 9% indicated their ethnicity to be Arab;
- 4% indicated their ethnicity to be Pakistani;
- 4% indicated their ethnicity to be African;
- 4% indicated their ethnicity was any other white background;
- 2% indicated their ethnicity was any other Asian background;
- 2% indicated their ethnicity was mixed/multiple ethnic groups;
- 2% indicated their ethnicity was another Black/African/Caribbean background; and
- 2% indicated their ethnicity was another ethnic group.

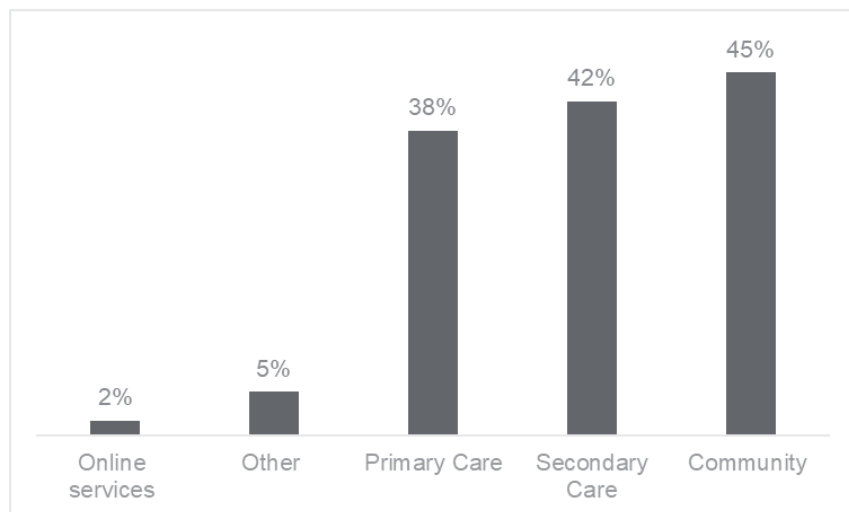
**Awareness:** 55% of Undergraduate Pharmacists were made aware of the clinical placement pilot programme through their HEI. 45% first heard of the placements through university communications.

**Region:** The Undergraduate Pharmacists that responded to the survey did so from seven different regions within the UK. This demonstrates representation from all regions included in the survey sample. These regions and the percentage of Undergraduate Pharmacists from each of them are detailed below:

- 29% - North West
- 24% - Midlands
- 20% - North East and Yorkshire
- 15% - South West
- 5% - South East
- 5% - East of England
- 2% - London

Undergraduate Pharmacists were asked to indicate all the settings in which they had completed a placement. Just under half (45%) of the Undergraduate Pharmacists completed at least one of their placements within a community setting. The figure below details the split in pharmacy settings that placements were held.

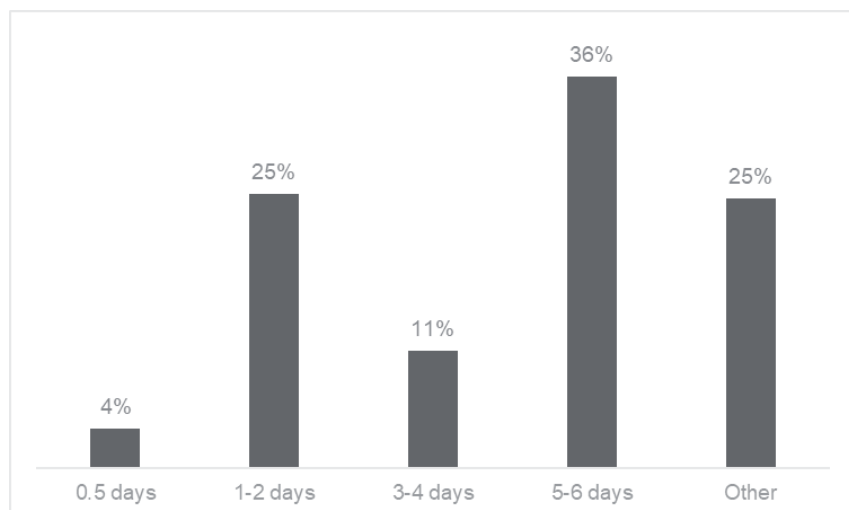
Figure 4: Pharmacy settings that Undergraduate Pharmacists carried out their placement



Source: Undergraduate Pharmacist survey (N=55)

36% of Undergraduate Pharmacists indicated their placements lasted 5-6 days. 25% indicated their placements lasted 1-2 days and 11% indicated their placements lasted 3-4 days. The full breakdown of placement lengths can be seen in the figure below.

Figure 5: Length of Undergraduate Pharmacist placement



Source: Undergraduate Pharmacist survey (N=55)

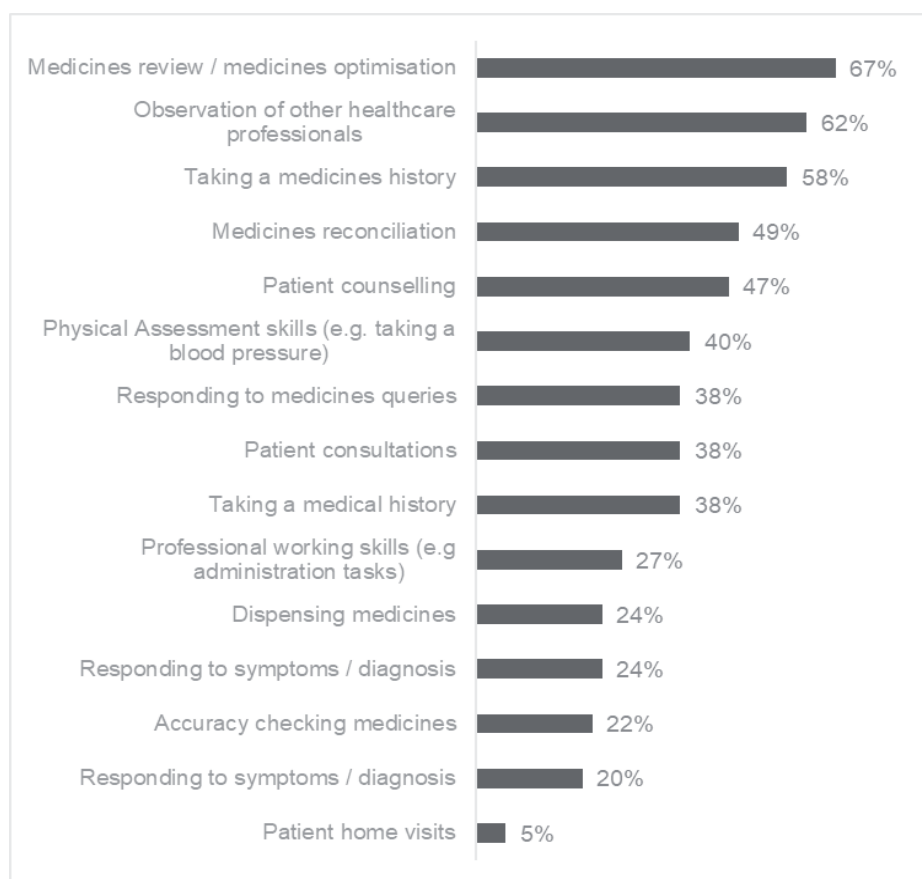
40% of Undergraduate Pharmacists indicated that their placement was structured with the use of continuous days working within a placement. 27% indicated they attended placement one day a week over a series of weeks (1-8 weeks). Other placement structures included one full day of placement.

## 4.2.2 Undergraduate Pharmacists experience of the pilot programmes

89% of Undergraduate Pharmacists indicated that their placement had agreed learning objectives. Of these Undergraduate Pharmacists, 80% indicated they were assessed in terms of communication/ patient facing skills (e.g., patient counselling, history taking), 67% indicated they were measured in terms of clinical skills (e.g. medicines reconciliation and medicines optimisation), and 45% indicated that they were measured in terms of personal development and progression (e.g. portfolio recording) as a learning objective.

The figure below indicates that the majority (67%) have undertaken medicines review and medicines optimisation as part of their placement, similarly 62% have undertaken observation of other healthcare professionals as part of the pilot. The full breakdown of activities undertaken within the pilot programme can be seen below.

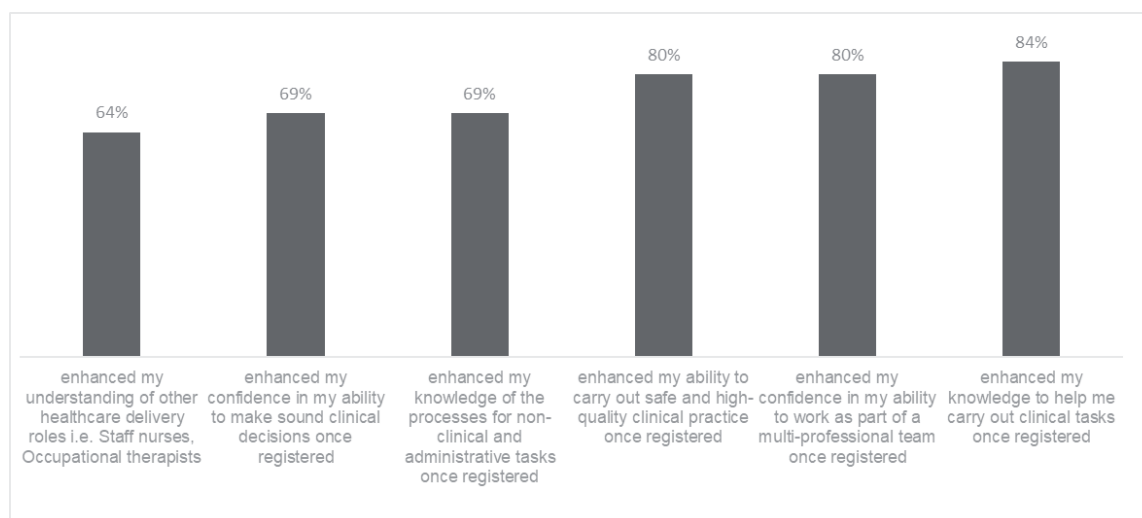
Figure 6: Activities undertaken as part of the clinical pilot programme



Source: Undergraduate Pharmacist survey (N=55)

84% of Undergraduate Pharmacists agreed/strongly agreed the pilot enhanced their knowledge to help them carry out clinical tasks in working towards registration. Similarly, 80% agreed/strongly agreed the pilot placement enhanced their confidence in their ability to work as part of a multi-professional team once registered and 80% also agreed/strongly agreed the placement enhanced their ability to carry out safe and high-quality clinical practice once registered. The chart below demonstrates the percentages of Undergraduate Pharmacists that agreed/strongly agreed with the following statements.

Figure 7: Extent of Undergraduate Pharmacist knowledge and skills gain during the pilot programme (based on % strongly agreed/ agreed with statements)



Source: Undergraduate Pharmacist survey (N=55)

78% of Year 4 students felt that the pilot placement provided them with a broader range of placement experiences than in placements in previous academic years. The reasons for this include increased time on placement flexibility and exposure to a real-life environment.

“The length of placement and unregimented timetable were beneficial as they allowed me to become absorbed into the surrounding environment and truly experience how pharmacy life works from all perspectives.”

All Undergraduate Pharmacists that answered the question “If the pilot programme had not been available to you, in what ways do you feel that your knowledge, competence, confidence and skills would have been different when moving into the workforce?” mentioned in open text responses that their confidence, knowledge, and skills would have been lower without this placement.

“I think that the pilot programme was very beneficial in showing how we can use the knowledge we learn in University in different ways in cases.”

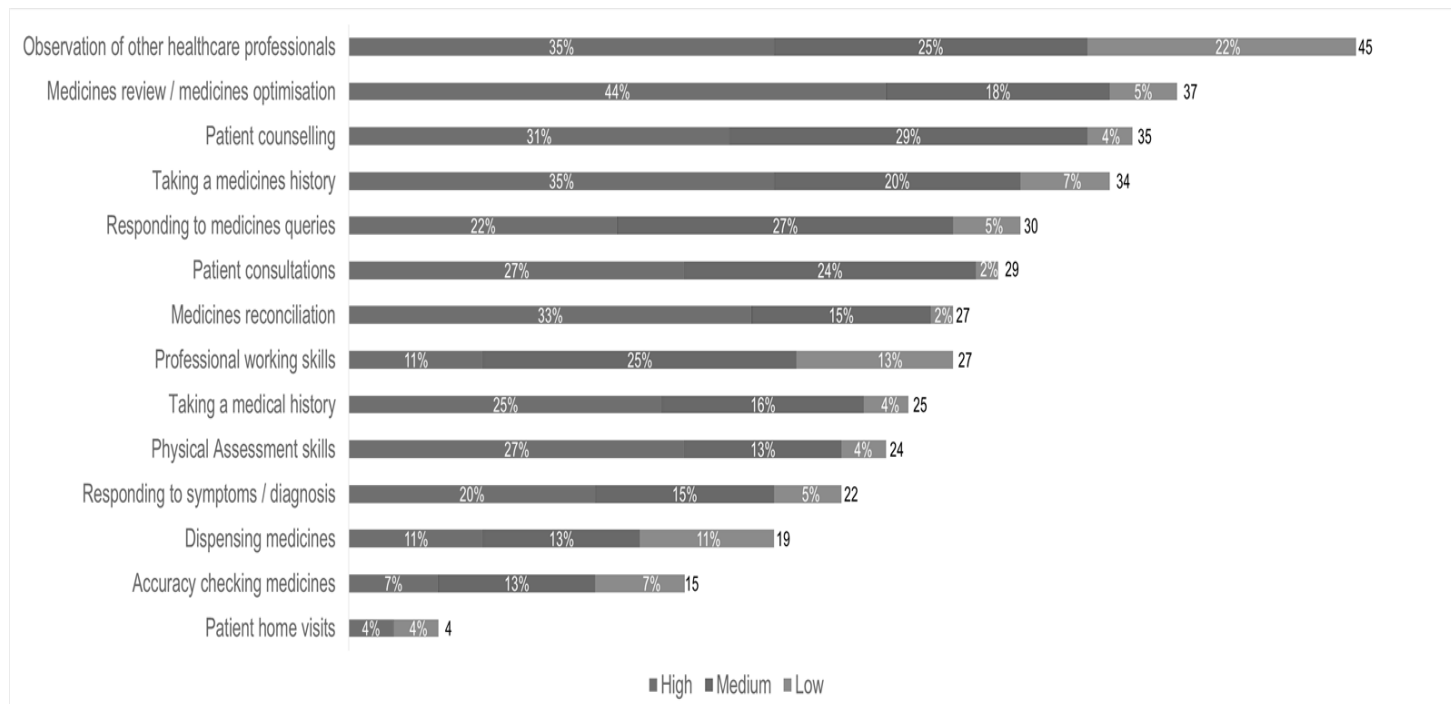
“I would have limited knowledge and experience prior to going onto to the workforce as to what it means to apply my clinical knowledge to specifically polypharmacy cases and how to correctly optimize a patient's medication to best help them and provide the best care possible”

#### 4.2.3 Educational supervision received by Undergraduate Pharmacists during the pilot programme

The majority (80%) of Undergraduate Pharmacists agreed/strongly agreed that the pilot programme provided them with enough educational supervision from their identified supervisor during their placement. Similarly, 85% agreed/strongly agreed that the educational supervision provided during the pilot placement helped in achieving the learning outcomes of the placement.

In terms of individual activities that Undergraduate Pharmacists were supervised on, 45% indicated that they were highly supervised on medicines review and optimisation, 35% indicated that they were highly supervised while taking a medicine history, and 33% state that they were highly supervised whilst completing a medicine reconciliation. The full breakdown of activities and level of supervision is detailed in the figure below:

Figure 8: Level of supervision for tasks in the clinical placement programme

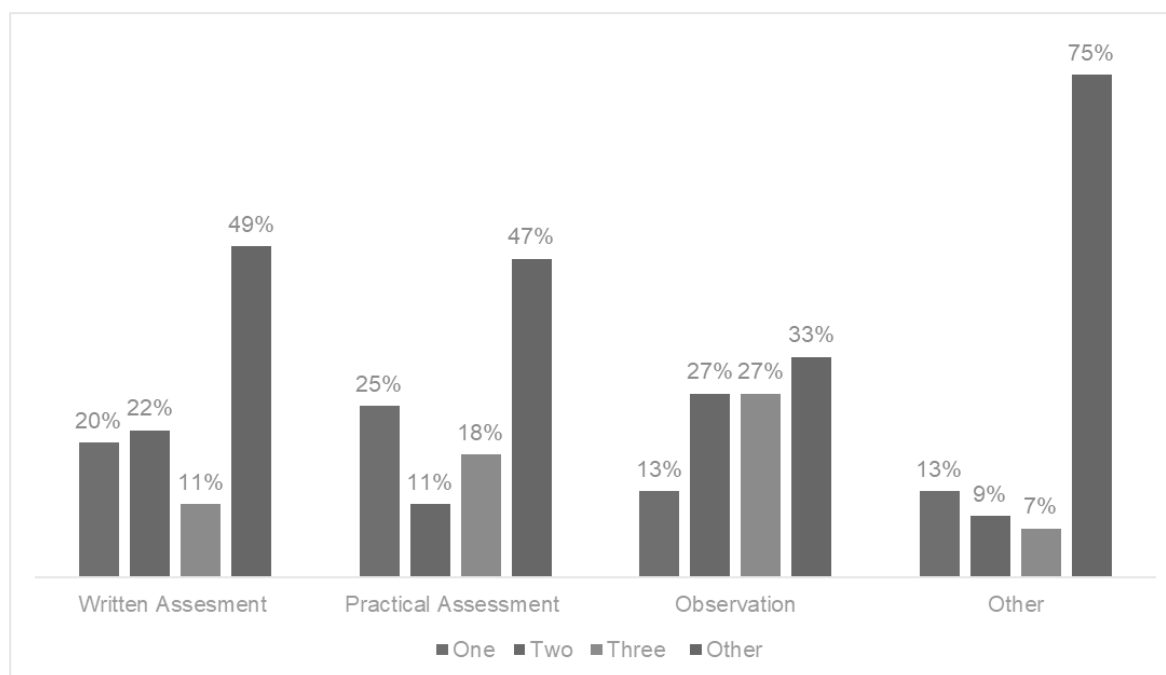


Source: Undergraduate Pharmacist survey (N=55)

Undergraduate Pharmacists were asked about the type and frequency of different forms of assessments which were undertaken during their placement 49% of Undergraduate Pharmacists indicated they had undertaken a written assessment at 'other' times during the pilot (this could mean more or less than the stated options). This theme continues across practical assessments, observation, and any other type of assessment, with trainees indicating they had completed the assessment 'other' times.



Figure 9: Types of assessment undertaken by Undergraduate Pharmacists during the clinical placement pilot



Source: Undergraduate Pharmacist survey (N=55)

#### 4.2.4 Perceived successes and challenges that occurred during the programme

Out of 36 open text responses to the question ‘Overall, based on your own experiences, what worked well for you during your placement?’, most comments described positive experiences of the programmes, with a small number of negative overall experiences and a range of factors that influenced this experience. A positive factor identified was the staff available to support the Undergraduate Pharmacist while on placement and the opportunity to experience multi professional working: *“the staff were all really helpful and eager to help me. I was able to work with about seven different types of healthcare workers, which was so useful”*

However, two responses mentioned that ‘nothing’ worked well: *“Nothing, I was so out of place”*. Other responses that identify the challenges of the pilot programme included disorganisation: *“this was the first time the placement was done so the organisation wasn’t great, which they did explain, and this allowed for more freedom of what we wanted to do on this pilot”*.

To improve the programme, 26% of Undergraduate Pharmacists mentioned that the placements need to be longer to allow more time to learn practical skills. *“To have a full week in [a] GP practice and allow more practical skills like taking blood pressure”*. 23% of Undergraduate Pharmacists also indicated that qualified Pharmacists need to be more aware of the purpose of the placement so they can use the time within the placement more effectively *“Make sure that the community pharmacists are aware of the purpose of the visit so that they can factor in timings that work well to complete clinical tasks like meds reviews/ CPCSS (Community Pharmacist Consultation Service)”*

## Summary of key findings:

- 84% of Undergraduate Pharmacists agreed/strongly agreed the pilot enhanced their knowledge to help them carry out clinical tasks once registered.
- 80% agreed/strongly agreed the pilot placement enhanced their confidence in their ability to work as part of a multi-professional team once registered and 80% also agreed/strongly agreed the placement enhanced their ability to carry out safe and high-quality clinical practice once registered.
- 78% of Year 4 students feel the pilot placement provide them with a broader range of placement experiences than in placements in previous academic years.
- The majority (80%) of Undergraduate Pharmacists agreed/strongly agreed that the pilot programme provided them with enough educational supervision from their identified supervisor. Similarly, 85% agreed/strongly agreed that the educational supervision provided during the pilot placement helped in achieving the learning outcomes of the placement.
- 26% of Undergraduate Pharmacists mentioned that the placements need to be longer to allow more time to learn practical skills, suggesting that the average time between one and six days on placement was not long enough.

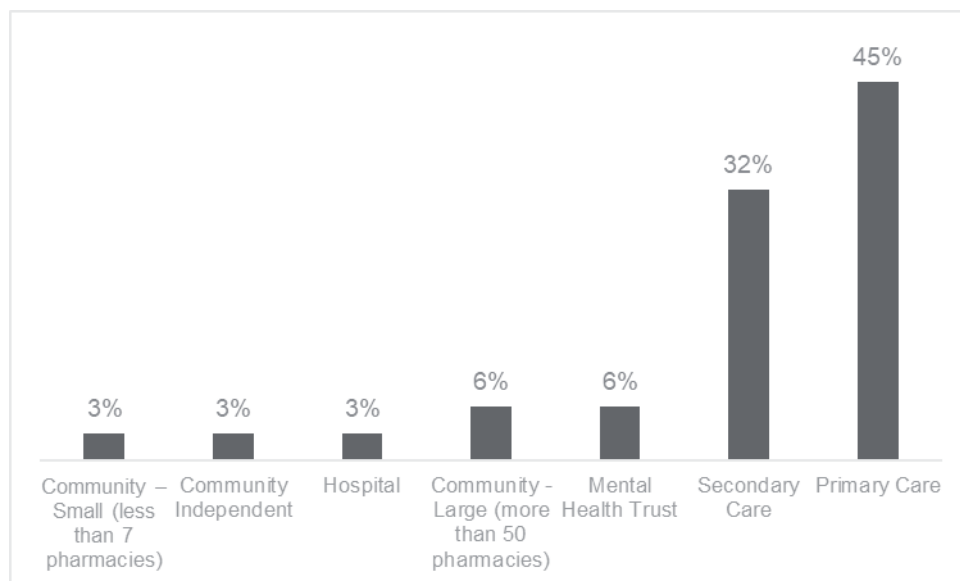
### 4.3 Education and Practice Supervisors survey

A survey of Education and Practice Supervisors was conducted from 26<sup>th</sup> January 2023 to 6<sup>th</sup> March 2023. 31 Education and Practice Supervisors completed the survey to gather their perceptions of the Undergraduate Pharmacists' Clinical Placement Pilots (2021-22). The survey covered: experience with the pilot programmes placement objectives and activities; Education and Practice Supervisors perceived impact of the pilot programme; experience with providing educational supervision during the pilot programme; and any perceived success and challenges that occurred during the programme. The questionnaire used for the survey can be found in Annex 4.

#### 4.3.1 Education and Practice supervisors' profile

The figure below indicates that the largest percentage (45%) of Education and Practice Supervisors which responded to the survey work within a primary care. The second largest setting in which Education and Practice Supervisors were from (32%) was secondary care. 6% of Education and Practice Supervisors came from mental health trusts and large community pharmacy settings respectively, with 3% originating from Hospitals, independent community pharmacy settings and small community pharmacy settings respectively.

Figure 10: Percentage of Education and Practice Supervisors from each pharmacy setting



Source: Education and Practice supervisors survey (N=31)

The Education and Practice Supervisors who responded to this survey worked in multiple different regions. These regions and the percentage of Education and Practice who work within them are listed below:

- 26% - South-West;
- 19% - London
- 19% - Midlands;
- 19% - North West;
- 10% - East of England; and
- 6% - South-East.

No responses were received from the Northeast and Yorkshire region.

29 out of the 31 (94%) Education and Practice Supervisors indicated they were aware of the Undergraduate Pharmacists Clinical Placement Pilots (2021-22) and continued to answer the remainder of the survey.

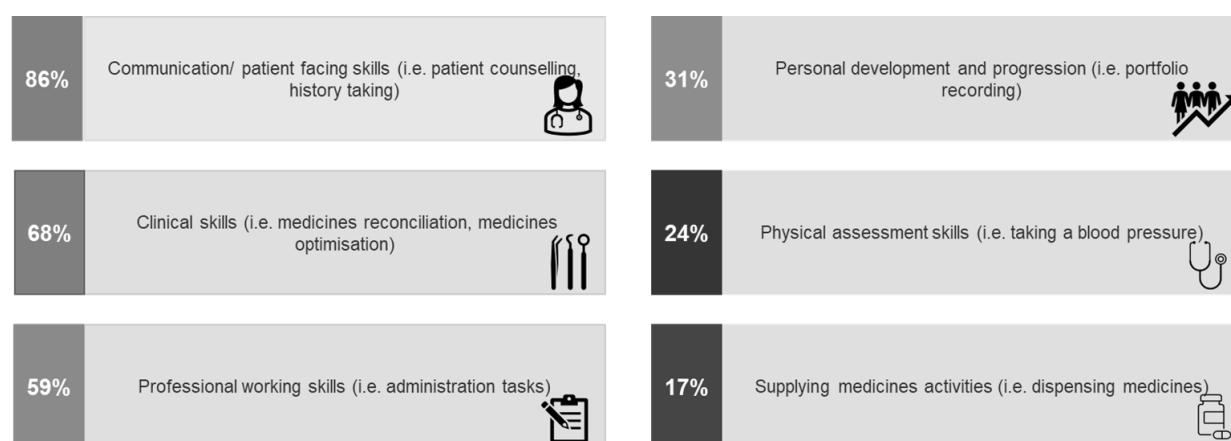
Survey results indicate the majority of Education and Practice Supervisors first heard about the clinical pilot programme through direct university communications (48%). 16% were made aware of the pilot programme through HEE communications (e.g. email, twitter feed, social media, website) and by word of mouth respectively. 13% of Education and Practice Supervisors were made aware through call for bids.

Over three quarters (83%) of Education and Practice Supervisors stated their organisation was an existing placement provider. 14% mentioned they were a new placement provider, while 3% were unsure if they had previously provided student placements.

### 4.3.2 Education and Practice Supervisors experience with the pilot programmes placement objectives and activities

Education and Practice Supervisors were asked if they were aware of any learning objectives as part of their supervisory role for the pilot placement. The majority of Education and Practice Supervisors (97%) indicated they were aware of learning objectives as part of their supervisory role. The individual learning objectives which were supervised are detailed in the figure below.

Figure 11: Learning objectives Education and Practice Supervisors indicated they had supervised



Source: Education and Practice supervisors survey (N=29)

When asked which of the following activities did undergraduates taking part in the placement programme undertake at your placement site, Education and Practice Supervisors reported the following:

- 79% conducted observation of other healthcare professionals;
- 72% conducted medicines review / medicines optimisation;
- 66% conducted patient consultations;
- 59% conducted Medicines reconciliation;
- 59% responded to medicines queries;
- 55% conducted Patient counselling;
- 45% conducted Professional working skills (e.g. administration tasks);
- 45% conducted Taking a medicines history;
- 31% assessed symptoms / made a diagnosis;
- 24% conducted physical assessment skills (e.g. taking a blood pressure);
- 21% took a patient's medical history;
- 17% dispensing medicines;
- 7% checked accuracy of medicines; and,

- 7% conducted patient home visits.

The activities listed by Education and Practice Supervisors were broadly consistent with the activities listed by Undergraduate Pharmacists when asked what activities they had participated in (see Section 4.2.2).

When asked if there were any other activities Education and Practice Supervisors would like to see provided for students, 100% agreed that there were no further activities needed, with one respondent mentioning;

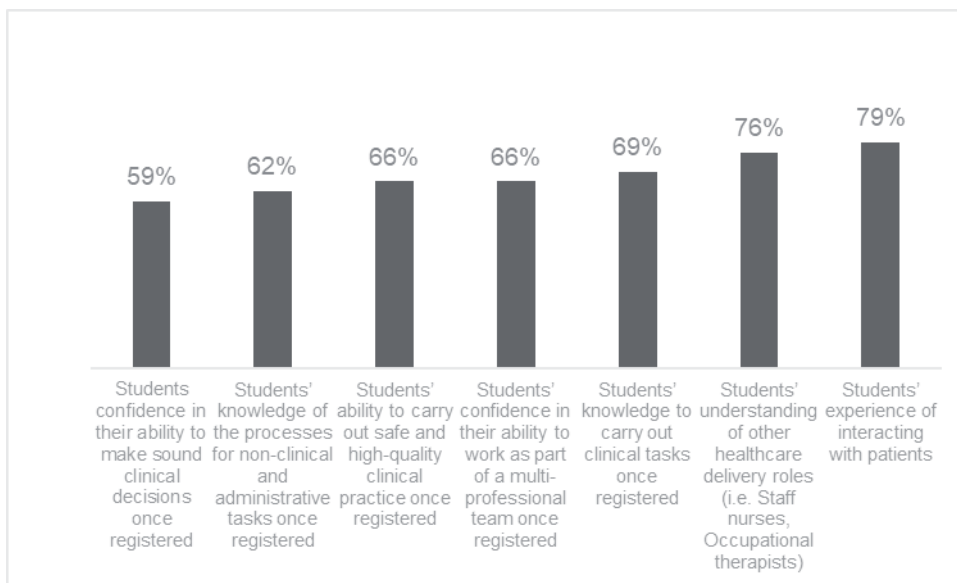
“I found the programme to be flexible and allowed us to place the student according to their interest and practice facilities”

### 4.3.3 Education and Practice Supervisors perceived impact of the pilot programme

79% of Education and Practice Supervisors agreed/strongly agreed that the pilot programme has enhanced students’ experience of interacting with patients.

As shown in the figure below, Education and Practice Supervisors were asked to what extent they agreed or disagreed with statements relating to the impacts of the initiative.

Figure 12: Percentage of Education and Practice Supervisors who agreed/ strongly agreed with various perceived impacts of the pilot programme



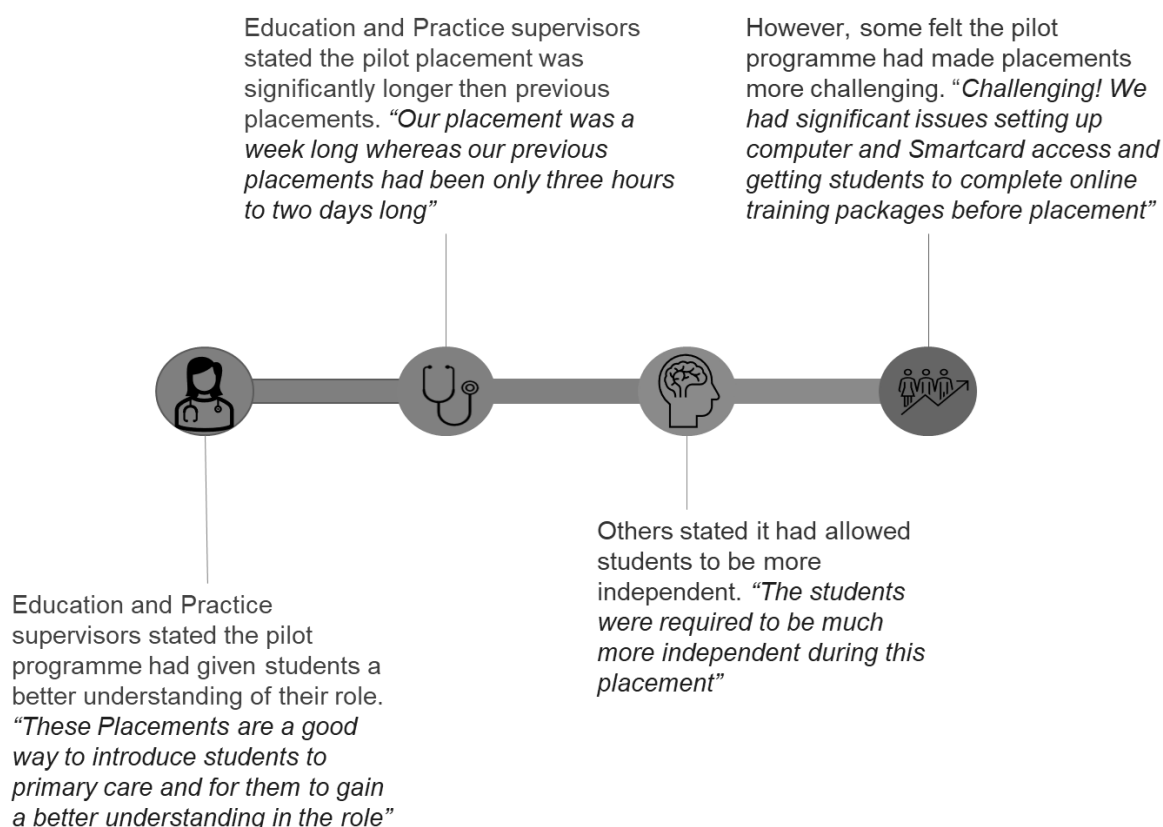
Source: Education and Practice supervisors survey (N=29)

76% of Education and Practice Supervisors indicated they agreed/strongly agreed that the pilot programme meets the training needs of Undergraduate Pharmacists. Similarly, 76% also agreed/strongly agreed that the pilot programme improved the training provision for Undergraduate Pharmacists in their setting.

When asked ‘Please can you describe how the delivery of the pilot placement programme has been compared to previous placements that you may be aware of or have been

involved in providing?’ 19 Education and Practice Supervisors gave open text answers. These answers are summarised in the figure below.

Figure 13: Education and Practice supervisors’ opinions of the pilot programme compared to previous placements



Source: Education and Practice supervisors survey (N=29)

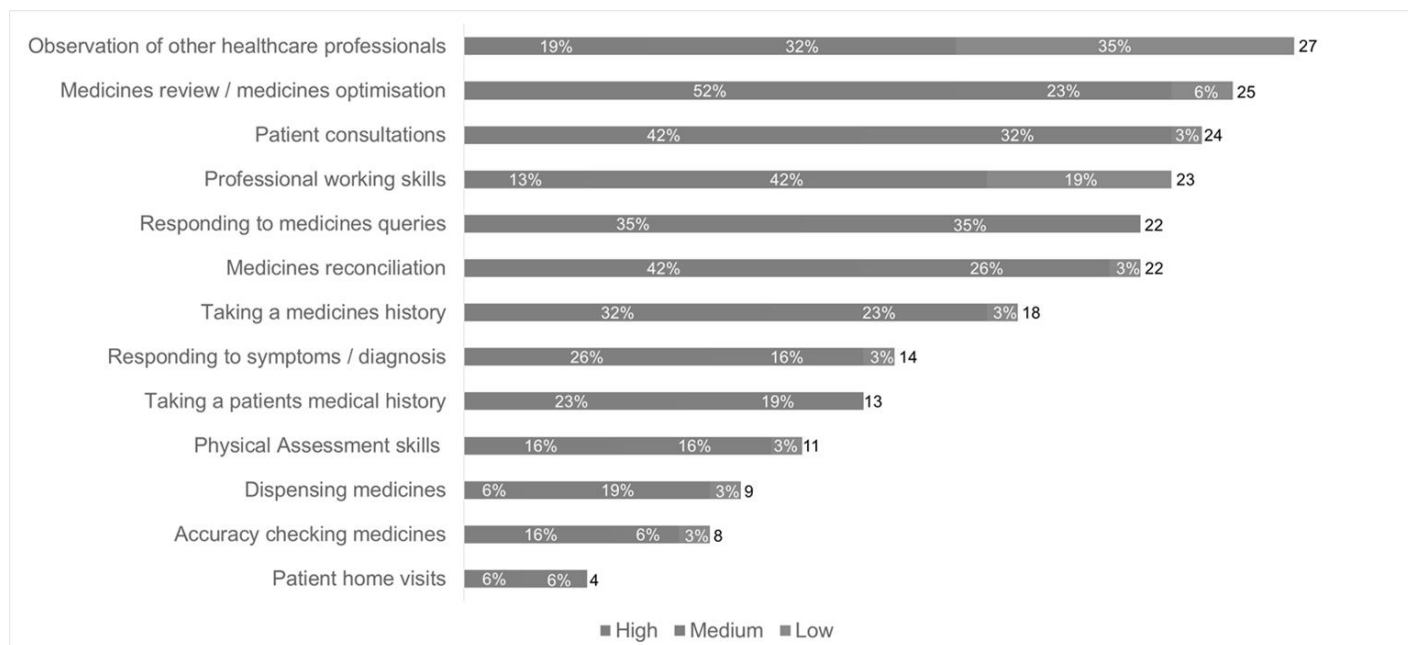
#### 4.3.4 Education and Practice Supervisors experience with providing educational supervision during the pilot programme

As displayed in the figure below, Education and Practice Supervisors were asked to indicate their level of educational supervision provided for each task, on a scale from high, medium, low and not applicable.

Education and Practice Supervisors indicated that the tasks which required the highest degree of supervision were:

- 55% indicated they had to highly supervise both patient consultations and medicines review/optimisation;
- 45% indicated they had to highly supervise both medicines reconciliation and patient counselling;
- 38% indicated they had to highly supervise responding to medicines queries; and,
- 34% indicated they had to highly supervise taking a medicine history.

Figure 14: Levels of supervision by Education and Practice Supervisors by task



Source: Education and Practice supervisors survey (N=29)

Just over half (52%) of Education and Practice Supervisors indicated they had conducted a written assessment with an Undergraduate Pharmacist during the pilot programme. The majority (72%) stated they had conducted a practical assessment with an Undergraduate Pharmacist. All (100%) indicated they had observed the student during the pilot programme.

Over half (62%) of Education and Practice Supervisors agree/strongly agree that they were provided with the right resources to support students during their pilot placement, with 17% disagreeing/strongly disagreeing.

34% of Education and Practice Supervisors agree/strongly agree that they had enough time and capacity to support students during their pilot placement. Interestingly, 34% also disagree/strongly disagree with the same statement. The survey did not ask for the reasons Education and Practice Supervisors had these views.

When asked “*what did you put in place to support raising concerns surrounding the progress of trainee pharmacists by supervisors?*”, 16 Education and Practice Supervisors responded with open text answers. 38% of these Education and Practice Supervisors mentioned that it was important to provide means of communication.

Other answers included ensuring there was a “formal escalation process” and ensuring “supervisors had training prior to the placements and knew to contact the clinical tutors if they had any concerns”.

When Undergraduate Pharmacists were asked about their own support for raising concerns, the same themes were noticeable, with Education and Practice Supervisors

stating, *“there was an open door with supervisors / practice manager if [the student had] concerns”* and *“Students saw the clinical tutors each morning and had visits from us during the day. They also had a ward pharmacist who they knew to speak to and contact details for the clinical tutors.”*

#### **4.3.5 Perceived success and challenges**

Education and Practice Supervisors were asked what successes they had identified during the pilot programme. The following themes were identified from 20 open text responses;

- the attitude of the students within the programme, *“the quality and how proactive the students were”*;
- establishing a practical learning structure for the student and future placements, flexibility in changing what students were doing to ensure they received a good experience”;
- student experience and learning, leading to contextual familiarity and situational awareness. *“Students were exposed to the real workings of a hospital environment to a much greater extent than previous placements. This meant they were immersed in the ward environment and were able to learn by observing other Health Care Professionals and became more comfortable in what can be a hectic environment.”*; and
- an improvement in the relationship between placement providers and universities *“Experience in teaching and better linking with universities”*.

Education and Practice Supervisors were also asked what challenges they faced during the pilot programme. From 19 open text responses, 53% mentioned they had insufficient time and resources to effectively observe and tutor students. *“Limited resources from a staffing perspective, having to supervise students whilst still undertaking day job activities”*. Other responses mentioned *“that some students struggled with the self-directed nature of the placements and wanted to be told what to do”* and *“The less independent students did not gain as much from the placements as the more independent students.”*

Of the 17 Education and Practice Supervisors who responded to the question *“Overall, based on your own experiences do you have any recommendations or areas for improvement that could be considered as the programme develops going forward?”* 29% stated that more pre training supports such as *“Smoothing IG/IT/pre-training issues”* and *“Development of e-learning to upskill ward pharmacists”* could improve the programme. Other recommendations given included increased funding and increasing staff time with students.

Summary of key findings:

- The largest percentage (45%) of Education and Practice Supervisors which responded to the survey work within a Primary care setting. 32% work within secondary care. 6% of Education and Practice Supervisors came from mental health trusts and large community settings respectively, with 3% originating from hospitals, independent community settings and small community settings respectively



- Over three quarters (77%) of Education and Practice Supervisors stated their organisation was an existing placement provider.
- 74% of Education and Practice Supervisors agreed/strongly agreed that the pilot programme has enhanced students' experience of interacting with patients.
- 71% of Education and Practice Supervisors indicated they agreed/strongly agreed that the pilot programme meets the training needs of Undergraduate Pharmacists. Similarly, 71% also agreed/strongly agreed that the pilot programme has improved the training provision for Undergraduate Pharmacists.
- 32% of Education and Practice Supervisors agreed/strongly agreed that they had enough time and capacity to support students during their pilot placement. Interestingly, 32% also disagreed/strongly disagreed with the same statement.
- 53% of responses stated they had insufficient time and resources to effectively observe and tutor students.
- When considering how the pilot programme compared to previous placement programmes, Education and Practice Supervisors cited the length and placements and independence of students as positive changes.

## 5. Interview findings

### 5.1 Interviews with Higher Education Institutions (HEIs)

Interviews with HEIs who have been involved in the setting up and delivery of the pilot programme were conducted. 12 interviews with HEIs were undertaken between October 2022 and January 2023. A thematic analysis of interview responses was undertaken, in line with the evaluation requirements, the findings of which have been collated below.

Topics included:

- the aims and objectives of the placement pilot programme;
- how the pilot programme was delivered;
- the impact on skills, knowledge and professional activities of pharmacy undergraduates; and
- successes and challenges of the pilot programme.

#### 5.1.1 Aims and objectives of the pilot programme

All HEIs interviewed demonstrated an understanding of the aims of the pilot programme, describing the programme as:

- an opportunity to upscale placement provision for undergraduate students;
- exploring the feasibility of providing placements within different settings;
- increasing the amount of placement hours undertaken by undergraduate students;
- building links with new placement providers;
- increasing the range of activities undertaken on placements;
- developing new placement models; and
- testing how placement provision can align to the new GPhC standards.

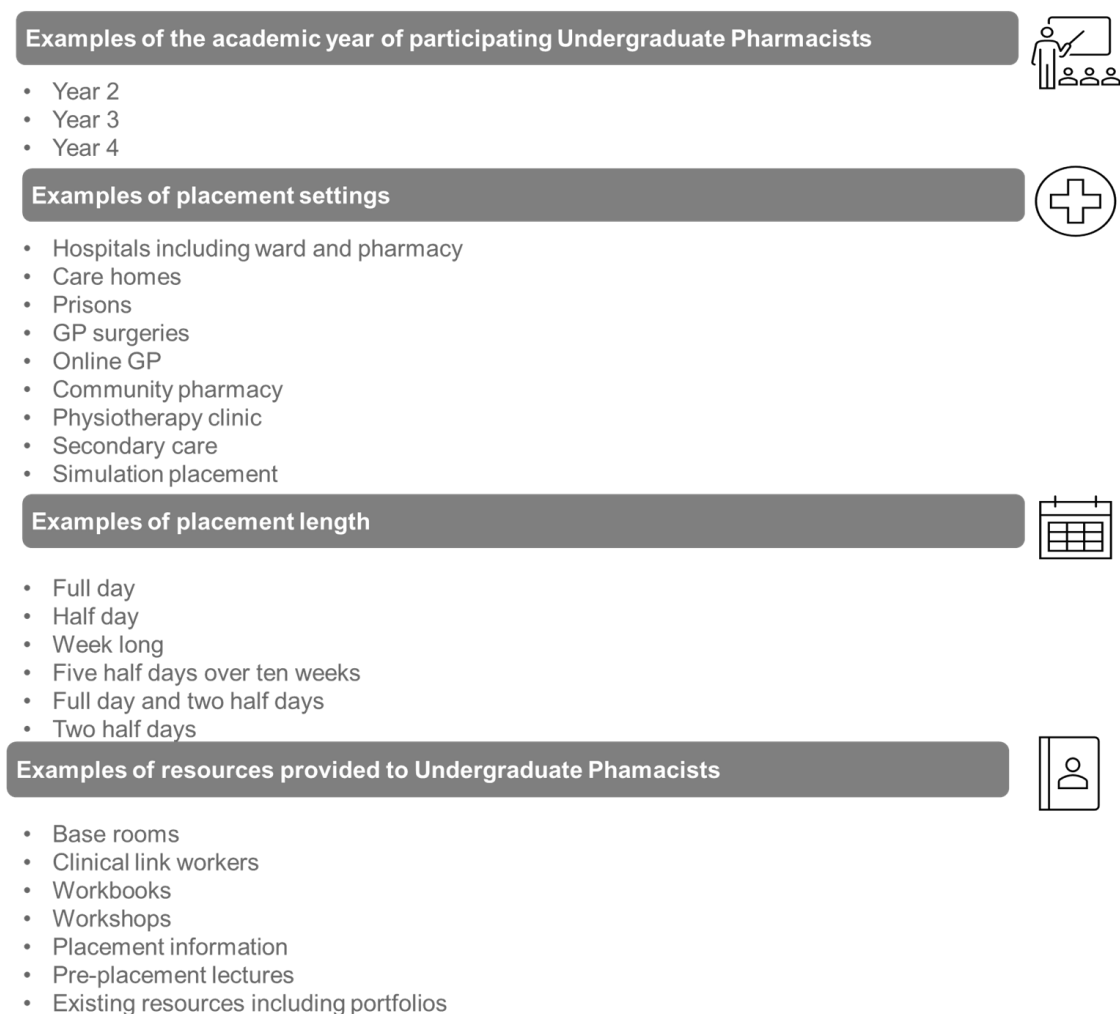
HEIs described the pilot programme as being an opportunity to deliver placements to Undergraduate Pharmacists in line with the new GPhC standards: *“to understand how placements could be upscaled in order to meet the GPhC 2021 outcomes, that would not only mean upscaling in terms of number of placements, but upscaling in terms of the kind of things that students would be doing on placements.”* Furthermore, HEIs described the pilot as being an opportunity to be creative in terms of placement designs and exploring feasibility of using different placement to give students a wider breadth of experiences and to expand placement provision.

#### 5.1.2 How the pilot programme was delivered

All HEIs designed and delivered the placement models differently within their local sites, with student participation numbers varying from two students up to full cohorts. Most HEIs

created new placement models whilst a small number described it as being an expansion of existing provision. Placements were delivered to students in the following ways:

Figure 15: Delivery components across HEIs



Source: Interviews with HEIs and Health Education England Undergraduate Pharmacists' clinical placement pilots (2021-22) School of Pharmacy report<sup>22</sup>

### Student learning objectives

Given the wide range of placements delivered to undergraduate students, student learning objectives (as reported by HEIs representatives who were interviewed) varied across HEIs. HEIs shared that student learning objectives included the following:

- increasing clinical skills e.g. medicines reconciliation, medicines optimisation and drug histories;
- undertaking patient communications and consultation skills;
- understanding the role of non-medical prescribers;

<sup>22</sup> Health Education England (2022): HEE's Undergraduate Pharmacists' clinical placement pilots (2021-22) School of Pharmacy report

- increasing understanding of patient journeys through the health care system;
- understanding and experiencing multidisciplinary working;
- understanding different pharmacy roles e.g. independent prescribers, advanced clinical practitioners;
- building on understanding of community pharmacy;
- increasing existing knowledge of general pharmacy; and
- increasing understanding of future career options.

#### Quality assurance of pilot placements

When asked about how pilot placement providers were quality assured for Undergraduate Pharmacists, most HEIs highlighted using a variety of material including: site risk assessments, pre-placement student lectures, webinars, feedback forms and surveys for both providers and Undergraduate Pharmacists. One HEIs shared: *“We provided a webinar training evening for the new placement tutors. So, they were required to attend the training and then we did a very detailed questionnaire afterwards.”*

A small number of HEIs noted that they re-purposed existing processes, due to either using existing providers, having in-house mechanisms already in place or being fit-for purpose: *“We have our own in house, and some of our providers were current providers that we had already. So, to some extent they didn't need to be quality assured again. So, they were already in place and the only thing I can say is that I had personal contact through emails and then through individual meetings with each provider site to ensure that they were sent our learning outcomes and the logbook which was going to be used for the students and to assure me that they could complete all of those activities.”*

#### **5.1.3 The impact on skills, knowledge and professional activities of pharmacy undergraduates**

The majority of HEIs interviewed indicated that Undergraduate Pharmacists who took part in the pilot programme placements improved their training, knowledge, practical skills and positively affected their experiences of professional activities: *“They've been exposed to some new ways of thinking and ideas about how people who are presenting with minor ailments might be assessed as well as understanding that there's another referral pathway, maybe that they weren't aware that they could refer to.”* Most HEIs also suggested that Undergraduate Pharmacists were able to practice clinical skills such as medicines reconciliation and optimisation, taking blood pressure and taking patient histories. In addition, Undergraduate Pharmacists were able to learn people skills in terms of patient empathy, having sensitive conversations around medication and delivering person centred care.

Most HEIs felt that the placements improved Undergraduate Pharmacists' confidence in understanding the role of a pharmacist in different health care settings: *“final year [students] who did their five-day placement, some of their feedback was really quite transformational, this was the highlight of their degree for them. It was the point at which they actually started to understand what a pharmacist did. So, to that extent it that pilot*

*was a game changer for that particular year group.*” Furthermore, placements improved student preparedness for Objective Structured Clinical Examination (OSCE) exams and preparation for Foundation Year.

Several HEIs noted that placements gave Undergraduate Pharmacists a better understanding of some of the different roles within different healthcare settings either through being part of an MDT or working in different settings such as general practice: *“They did get to understand the multidisciplinary team in general practice, because the way the placement worked, the students were on site in the practice and then a GP came to speak to them and a practice pharmacist came to speak to them, and a receptionist came to speak to them and they were all speaking about their different roles in the practice, patients who have been discharged and they got the opportunity to speak to some patients in the waiting rooms as well.”*

All impacts shared by HEIs for Undergraduate Pharmacists aligned to the logic model (Annex 6) outcomes and impacts relating to the Undergraduate Pharmacist experience including:

- enhance Undergraduate Pharmacists’ competence and confidence in delivering clinical services/activities and working as part of multi-professional teams;
- enable cultural change in pharmacy delivery that includes Undergraduate Pharmacists as part of active clinical team;
- growth in the number of clinical, patient-facing, accountable pharmacist practitioners across all sectors; and
- improved support for Undergraduate Pharmacists to gain practice-based skills effectively during the MPharm, preparing them for their training year.

#### **5.1.4 Successes and challenges of the pilot programme**

When asked about the success and challenges of the pilot programme, most HEIs highlighted positive outcomes of the pilot programme. However, several indicated a number of challenges that arose as shown in the figure below.

Figure 16: Successes and challenges

| Successes: |                                                                                                                | Challenges:                                                                                                    |    |
|------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----|
| 01         | Funding allocations allowed some sites to pilot different placement types, for example online GP's.            | Application turnaround time for HEI's submission to HEE was too short.                                         | 01 |
| 02         | Building new placement provider relationships.                                                                 | Fitting placements into university timetables was difficult as they are set during the previous academic year. | 02 |
| 03         | Innovative placement designs were trialled.                                                                    | Low uptake of optional placements.                                                                             | 03 |
| 04         | Placements gave Undergraduate Pharmacists exposure to new skills and different parts of the healthcare system. | COVID-19 impacted upon Undergraduate Pharmacists ability to attend placement sites.                            | 04 |
| 05         | Helped to prepare Year 4 students for Foundation year and widen career choices.                                | Funding allocations for rural locations were too low, due to high cost of travel.                              | 05 |

Source: Interviews with HEIs

### Successes

The majority of HEI interviewed highlighted the new design of placements as being an achievement of the pilot programme. One HEI suggested that they had *“developed a package that we think is valuable. But you know, it really is about that embedding of it, as an experience for us, and you know, for the students, and I think that this this kind of clinical placement worked really well.”*

HEIs indicated that they had been able to build new provider relationships and increase understanding about how different parts of the health care system can work together across other initiatives. For example, being offered *“to take part in a non-pharmacy specific project, but we were offered the opportunity to take part in another pilot of bundle placements. Where different students [pharmacists, nurses, doctors, physiotherapists] get sent on placement at the same time.”*

Most HEIs indicated that placements gave Undergraduate Pharmacists the opportunity to partake in participatory placements, expanding their skills and knowledge of both pharmacy and the wider health care system. Several HEIs also noted that it had helped to prepare Undergraduate Pharmacists for Foundation Year and was *“an opportunity to think about career choice”* for Undergraduate Pharmacists participating in the placements.

### Challenges

Whilst all placement providers were positive about being involved in the pilot programme, it was noted that it was difficult to accommodate the application process turnaround time. Fitting placements within the university timetable for the existing academic year was also raised as an issue, given that timetables for Undergraduate Pharmacists are set in the

previous academic year: *“our timetables are done in the summer and once we've got a timetable and rooms are booked for things and students are supposed to be in particular places at particular times, it's really, really hard to change that. So, if we get offered additional resource in year, by that stage, when we've already got students booked in to do other activities through the year, it's quite difficult to look and find the gaps.”*

HEIs with rural footprints suggested that better travel subsistence planning was needed for Undergraduate Pharmacists to enable schools to ensure rural geographies were able to host and increase rural placement numbers, as *“it is really important in terms of career choice and ensuring that those rural geographies also get students who have been there, and then want to apply to them, in the future.”*

Some HEIs also noted the impact of Covid-19 being a challenge as it meant that placements were postponed or cancelled due to the restrictions in certain areas, or health care settings: *“We were not allowed to work within the care home was because of Covid issues.”*

### **Summary of key findings:**

- Overall, HEIs felt that the pilot programme was an opportunity to increase the amount of placement hours for Undergraduate Pharmacists, building new links with placement providers and develop innovative placement models.
- All HEI delivered placement models differently within their local sites.
- HEIs shared that student learning outcomes varied across HEIs.

The majority of HEIs indicated that overall, Undergraduate Pharmacists who took part in the pilot programme improved their training, knowledge, practical skills and positively affected their experiences of professional activities.

## **5.2 Interviews with employers**

Interviews with employers who have been involved in the setting up and delivery of the pilot programme were conducted. Three interviews with employers were undertaken between February 2023 and May 2023. Of the employers interviewed, two were from different hospitals within the same trust with the same structure for the delivery of the pilot programme in place across both sites and one was an online GP provider. We had hoped to interview 10 employers, but it was difficult to recruit during the evaluation. A thematic analysis of interview responses was undertaken, in line with the evaluation requirements, the findings of which have been collated below. It must be noted that due to the sample size, findings are not representative of all employers providing placements via the pilot programme. Topics explored included:

- The aims and objectives of the placement pilot programme and your experience of it;
- Exploring how the pilot programme was delivered;
- The impact on employers and the professional activities of pharmacy undergraduates;
- Models of education supervision and how placements were quality assured by HEIs; and

- Identifying lessons around challenges and successes which can be used to inform the development of the programme going forward.

### **5.2.1 Aims and objectives of the pilot programme**

All employers demonstrated some understanding of the aims and objectives of the pilot programme when interviewed, describing it as an opportunity for Undergraduate Pharmacists to:

- gain further experience of different placement sites;
- build on their skills and knowledge;
- gain further understanding of different placement sites and pharmacy activities that take place within them;
- increase experiential learning and understanding of the professional environment; and
- change the structure of pharmacy education.

One employer described the pilot programme as being an opportunity to provide Undergraduate Pharmacists with “further experience in terms of building up their skills as well as being able to apply their knowledge and gain further knowledge.” Furthermore, one employer shared that it gave Undergraduate Pharmacists the opportunity to undertake activities similar to trainee pharmacists, supporting their development and understanding as they moved towards their pre-registration training year.

### **5.2.2 How the pilot programme was delivered**

Both pilot programmes were delivered differently by providers, with the hospital placement being an existing placement provider and online GP being a new provider. Across the two sites programmes were delivered in the following ways:



Table 6: Delivery components for employers

| Delivery component                              | Hospital placement                                                                                                                                         | Online GP placement                                                                                                                                                                                                                   |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Length of placement                             | 8 weeks                                                                                                                                                    | 4-week placement                                                                                                                                                                                                                      |
| Structure of placement                          | 1 day per week                                                                                                                                             | 5 days per week                                                                                                                                                                                                                       |
| Number of Undergraduate Pharmacists involved    | 10-12 split into two groups                                                                                                                                | 1                                                                                                                                                                                                                                     |
| Participatory or observational activities       | Participatory                                                                                                                                              | Both participatory and observational                                                                                                                                                                                                  |
| Activities undertaken                           | <ul style="list-style-type: none"> <li>• Patient histories</li> <li>• Medicines reviews</li> <li>• Patient consultations</li> <li>• Ward rounds</li> </ul> | <ul style="list-style-type: none"> <li>• Undertook audit</li> <li>• Poster creation for allergies</li> <li>• Online medicines portal</li> <li>• Pharmaceutical care plan and presentation</li> <li>• Supported prescribing</li> </ul> |
| Resources provided to Undergraduate Pharmacists | <ul style="list-style-type: none"> <li>• Weekly classroom sessions with presentations of the day's activities and learning objectives</li> </ul>           | <ul style="list-style-type: none"> <li>• Laptop</li> </ul>                                                                                                                                                                            |

### Quality assurance of pilot placements

When asked how placements were quality assured for Undergraduate Pharmacists, existing employers had some quality assurance processes in place including feedback forms for interviews with Undergraduate Pharmacists and staff at the end of the pilot programme and weekly feedback forms for tutors.

An interview with a new employer shared that as it was the first placement that they had hosted, there was no formal quality assurance process in place so they aligned quality assurance to their existing foundation training plan: *“I very much aligned it to our trainee pharmacist placement and looked at the activities that we would do and how I could modify them and knowing that those activities are mapped against our training plan, which has been assessed and we submit submitted to the GPhC.”*

### 5.2.3 The impact on skills, knowledge and professional activities of pharmacy undergraduates

Of the employers interviewed, all felt that the pilot programme worked well and provided Undergraduate Pharmacists with opportunities to improve their skills, knowledge and gain experience of professional activities. This included Undergraduate Pharmacists getting: “better exposure in terms of being able to have more meaningful contacts with patients on

the wards rather than just observing like the traditional placements that we've had, where they've just gone and shadowed on the ward whereas on the pilot they would actually be set tasks.”

When asked whether the pilot programme had improved Undergraduate Pharmacists experience of professional activity, all employers felt that the pilot programme gave Undergraduate Pharmacists the opportunity to understand the professional skills needed within the work environment: “some of them [Undergraduate Pharmacists] were quite reflective. I think it made them more aware of patient confidentiality. What could and couldn't be said when they go into the canteen for lunch, you know that we're talking about what they've been doing.” Additionally, employers felt that it gave Undergraduate Pharmacists more awareness of patient confidentiality and how to communicate with patients sensitively.

Employers felt that the pilot placements had enabled Undergraduate Pharmacists to become more confident and competent in clinical skills and better prepared Undergraduate Pharmacists for when they become registered pharmacists: “given the like the length of time [placement length], they're never going be a fully competent for doing histories or anything, because they are just doing it for a very short period of time, but they definitely were kind of getting towards that level in terms of their confidence with it and..... they definitely understood the principles of it and had the basic skills there.... for they do come into practice.” Furthermore, existing employers felt due to the extended length of placements Undergraduate Pharmacists became more accountable in delivering tasks when working with patients.

#### **5.2.4 The impact on organisations taking part in the pilot programme**

When asked about the impact of the pilot placement on their organisation, employers felt that the pilot programme had both positive and negative impacts on their organisations.

One employer felt that the pilot placement programme had been positive for developing their training provision and capacity. Sharing their participation “*across the MDT, across our governance structure so that they [Senior Management] were aware, and they were very supportive and of us taking a student and expanding our training capacity.*”

Although employers reflected that having Undergraduate Pharmacists within their organisations added value, all employers felt that the pilot programme was resource intensive. As Undergraduate Pharmacists “*need to be supervised as they don't have a swipe-card they don't have an electronic login so they literally couldn't even swipe to get to the toilet, so they actually were supervised all of the time.*” Furthermore, employers felt that student that they had to provide more supervision through explaining tasks than anticipated.

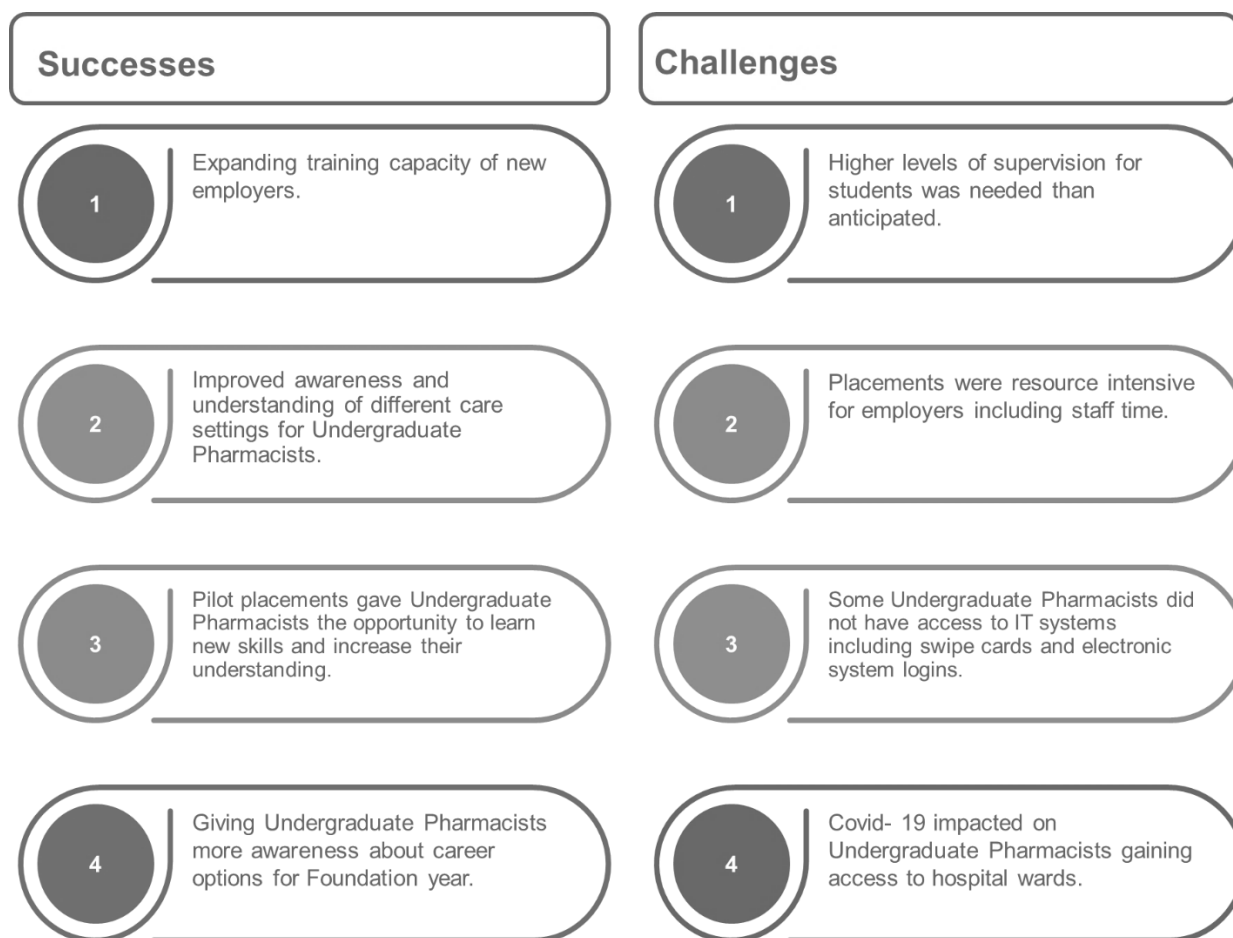
All employers interviewed felt that the pilot placements gave Undergraduate Pharmacists more awareness of different career options: “*One of our students from the placement pilot is actually going be doing Foundation training at the Trust this year, there were a few students who were quite surprised about what hospital pharmacy was like. So, someone who would have gone and done Community [Pharmacy] has now opted to do hospital foundation training.*”

One employer shared that the use of Foundation trainees in the pilot placement increased their capacity: “Foundation trainees did medicine histories with the students, gave them feedback on some of the patient counselling and we found out from the university, students like time with the Foundation Trainees, because they could ask them about foundation training, the whole Oriel process [Foundation trainee application process] they found that really nice and they are younger so they could relate to them a bit more and it kind of felt a bit more relaxed rather than us dinosaurs sitting talking to them.” Additionally, this also allowed for Foundation Trainees to ask Undergraduate Pharmacists for peer feedback which they were able to add into their competency logs as it provided them with some leadership and training skills.

### Successes and challenges of the pilot programme


When asked about the success and challenges of the pilot programme, employers responded with a number of positive outcomes. However, they did indicate a number of challenges that arose as shown in the figure below:

Figure 17: Successes and challenges



Source: Interviews with employers

### Summary of key findings:

- 
- Engagement with employers was low, but of those interviewed, two employers were from hospital settings, and one was from a primary care setting.
  - All employers felt that the pilot programme provided Undergraduate Pharmacists with more awareness of future career options and a broader range of placement experiences.
  - The new employers felt that the pilot programme had increased their training capacity.
  - Employers felt that pilot placements provided Undergraduate Pharmacists with increased knowledge and skills (e.g. communication skills with patients and professional skills including awareness and understanding of patient confidentiality).

## 6. Discussion

### 6.1 Strengths and limitations of the research

There are some key strengths and limitations of the evaluation to consider when drawing upon the findings to generate conclusions and considerations for the future, which are detailed below.

#### 6.1.1 Strengths

This evaluation aimed to capture data against the research themes described in Section 1.2 by conducting a number of research activities targeted at the different stakeholder groups involved in the pilot placements programme. These included HEIs, undergraduates who were on placements, education and practice supervisors and employers who provided placements. The evaluation **has captured views on the pilot programme from all these stakeholder groups** to allow triangulation. Additionally, some of these stakeholder groups have broad representation within the evaluation, most notably HEIs, of which 15 out of 21 of the schools involved were included in our programme of interviews (see Section 5.1).

The evaluation also **draws upon an established logic model**, (see Section 3) which details the inputs, activities outputs, outcomes and impacts associated with the pilot programme and has been co-designed with HEE.

#### 6.1.2 Limitations

There are three key limitations to consider when drawing upon the findings from this evaluation:

- **Quality of evaluation feedback forms:** The use of a non-standardised evaluation feedback form to gather feedback from HEIs that was analysed as part of the desk review (see Section 3) was of variable quality and lacked consistency between returns. This meant that using them to assess aspects of the research themes was difficult due to a lack of comparable data. The findings in this area are detailed in Section 3.8.
- **Reliance on HEIs to cascade information:** Gathering contact details and promoting engagement for participation in interviews and surveys from Undergraduate Pharmacists and employers was challenging due to the reliance on HEIs to cascade information on the evaluation. In some cases, HEIs were not able to prioritise supporting the evaluation due to other pressures upon their capacity and the education system. Furthermore, there were no mechanisms in place to recruit Undergraduate Pharmacists outside of term time due to their lack of contact with HEIs during this period.
- **Sampling limitations:** Due to poor engagement and a reliance on HEIs to cascade recruitment messages, the samples achieved across the survey of undergraduates (n=55), the survey of education and practice supervisors (n=31) and interviews with employers (n=3) were not large enough to achieve representation from the full breadth of HEIs and therefore placement models. As a result, there are some regions and placement models not represented within the findings from these research activities.

## 6.2 Key findings

### 6.2.1 HEIs

The key findings drawn from our research with HEIs that link to the key research themes identified in Section 1.2 are as follows:

**Student experience:** Overall HEIs felt that the pilot placement programme, **worked well** and provided Undergraduate Pharmacists with a **broader range** of placement experiences.

**Information and guidance:** HEIs felt that sharing good practice to support consistency in training levels and experiences for Undergraduate Pharmacists would be beneficial for future pilot placements. Furthermore, they felt that the **development of guidance tools** to support the supervising of Undergraduate Pharmacists (e.g. for supervisors, transport support, expected levels of feedback) would be helpful. Finally, HEIs felt that the development of a **repository of case studies** for placements in a variety of settings could support HEIs and employers in sharing best practice and developing new placement models.

**Programme structure:** There was **significant variation** in placement design and delivery models between HEIs delivered as part of the pilot programme, with **most creating new placement models, but some scaling up or adapting existing models** with the additional funding.

**Scheduling and planning:** If a similar pilot placement programme were to be implemented, **scheduling it an academic year in advance** would allow for HEIs to integrate it into school timetables better and enable development of more complex placement plans.

**Engagement amongst HEIs:** HEIs felt that there was an opportunity to **build relationships with HEE and between HEIs** to support more collaborative working and knowledge sharing as part of future pilot programmes. This would also support HEE to receive and evaluate ongoing feedback on the programme.

**Funding:** HEIs felt that **reviewing placement tariff levels** to support the implementation and rollout of setting up a more diverse range of placement sites.

### 6.2.2 Undergraduate Pharmacists

The key findings drawn from our research with Undergraduate Pharmacists that link to the key research themes identified in Section 1.2 are as follows:

**Student experience:** Undergraduate and Trainee Pharmacists described **positive experiences** of participating in the pilot programme with good levels of **educational supervision, participatory activities** and development of **skills and knowledge**. They felt that the pilot programme gave them a **broader range of skills including clinical skills and communication** through undertaking tasks such as medicines reviews and

patient histories. They also reported that the pilot placement programme enhanced their **preparedness for practice increasing their knowledge and confidence to help them carry out clinical tasks** in working towards registration.

**Programme structure:** If a similar pilot placement programme were to be implemented again, Undergraduate Pharmacists would have liked **longer placements** to embed and further enhance the skills and experience gained from them.

### 6.2.1 Education and Practice Supervisors

The key findings drawn from our research with Education and Practice Supervisors that link to the key research themes identified in Section 1.2 are as follows:

**Student experience:** Education and Practice Supervisors indicated they agreed that the pilot programme meets the training needs of Undergraduate Pharmacists and has **improved the training provision** for Undergraduate Pharmacists and **enhanced Undergraduate Pharmacists** experience of interacting with patients.

**Student experience:** Some Education and Practice Supervisors felt that they had **insufficient time, resources and capacity to support Undergraduate Pharmacists** during their pilot placement to effectively observe and tutor Undergraduate Pharmacists.

**Programme structure:** When considering how the pilot programme compared to previous placement programmes, Education and Practice Supervisors cited the **length of placements and independence of Undergraduate Pharmacists as positive** changes. Evidence shows that longer clinical and workplace placements are generally more effective as they allow better integration into teams, time to approach and learn more complex activities, and the gradual adoption of less supervision over these activities<sup>23</sup>.

### 6.2.4 Employers

The key findings drawn from our research with employers that link to the key research themes identified in Section 1.2 are as follows:


**Student experience:** Overall, employers felt that Undergraduate Pharmacists gained a broad range of placement experiences that enhanced their skills. They reported that placements were both **observational and participatory** allowing Undergraduate Pharmacists to **develop their skills and knowledge**.

**Programme structure:** Employers felt that **longer pilot placements** for Undergraduate Pharmacists would have enhanced opportunities for them to further the development of Undergraduate Pharmacists over time and embed improvements in their confidence, skills levels and professional conduct/ activities.

**Information and guidance:** If a similar pilot placement programme were to be implemented again employers felt that **more guidance** on the level of feedback and skill

---

<sup>23</sup> Gonzalez-Garca et al, 2021. The relationship between clinical placement duration and students' satisfaction with the quality of supervision and learning environment: A mediation analysis. *Nursing and Health Sciences*, 23(3):688-697.



levels of Undergraduate Pharmacists would be helpful for them to design the most appropriate placements.






## 7. Conclusions

Based on the findings summarised above, and with reference to the core objectives of the pilot programme and research themes for the evaluation described in Section 1, the following conclusions have been made:

Figure 18: Conclusions

---

|                                                                                     |                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>Aims and objectives of the placement pilots</b>                                                    | <p>Broadly, HEIs, employers and education and training supervisors reported that placements <b>achieved most of the outcomes and impacts identified in the evaluation logic model</b> (see Section 3.1.8), most notably:</p> <ul style="list-style-type: none"><li>• <b>improved support and practical experience</b> for Undergraduate Pharmacists;</li><li>• <b>improved infrastructure and capacity</b> for clinical placements;</li><li>• <b>testing a range of innovative placement models</b>; and</li><li>• <b>bridging the gap between the skills of Undergraduate Pharmacists and those of qualified pharmacists.</b></li></ul> |
|  | <b>Student experience of professional activity and impact upon skills and knowledge</b>               | <p>There are some outcomes and impacts that have not yet been fully achieved, most notably the standardisation of placements. Additionally, some of the longer-term impacts identified in the logic model cannot yet be fully tested (e.g. cultural changes within the sector). Due to sampling issues, it is not possible to assess if the programme represents both the seven NHS regions and a cross section of rural, urban and mixed environments.</p>                                                                                                                                                                              |
|  | <b>Programme structure and the resources and infrastructure provided to Undergraduate Pharmacists</b> | <p>The pilot placement programme provided Undergraduate Pharmacists with a <b>greater understanding of different pharmacy settings and provided them with a broad range of placement experiences</b>. The programme <b>improved the skills, knowledge and experiences of professional activities</b> for Undergraduate Pharmacists through participatory placements and conducting activities such as patient histories and taking blood pressure.</p>                                                                                                                                                                                   |
|                                                                                     |                                                                                                       | <p>Programme structures and placement models <b>varied across all HEIs</b>, with both new and existing providers and models included. <b>Largely, placement models were felt to be well-structured but educational supervision varied across these models</b>. The resources and infrastructure provided to Undergraduate</p>                                                                                                                                                                                                                                                                                                            |

---

---

Pharmacists to support their placements was partially **viewed to be sufficient and appropriate**, with some exceptions amongst education and practice supervisors.

---



### **Educational supervision and quality assurance of placements**

The extent to which placements were quality assured, and the method of quality assurance, **varied significantly** by placement model. HEIs and employers felt that **creating guidance tools would support the standardisation of placements** (including quality assurance, feedback for Undergraduate Pharmacists and structure of placements) and quality of Undergraduate Pharmacist training. HEIs felt this could be supported by the creation of a repository of case studies.

---



### **Developing and testing a range of innovative placement models**

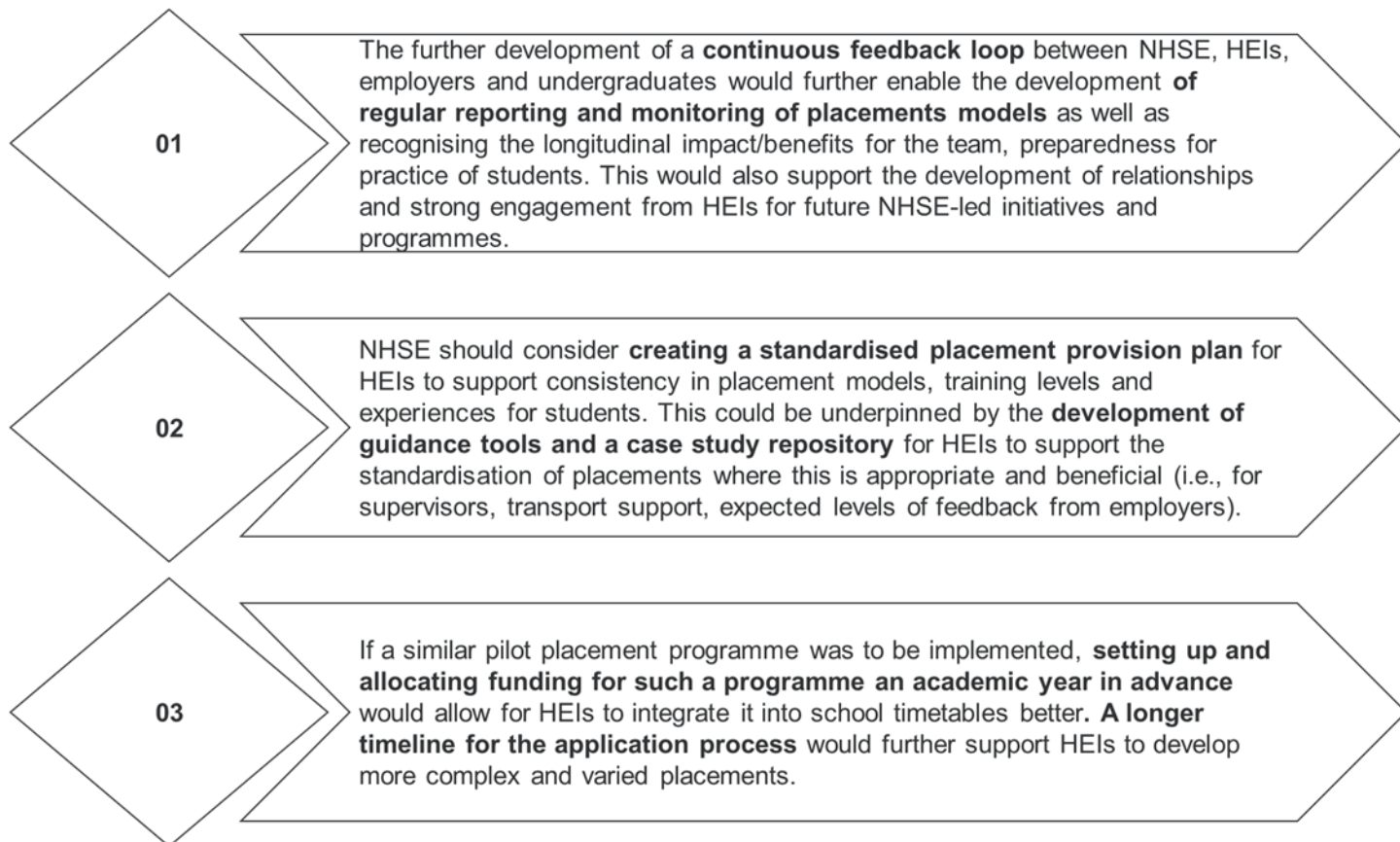
A variety of placement models and delivery methods were tested as part of the programme. Feedback from HEIs and employers on the relative success of different placement models was limited. Communication and reporting functions between HEE and employers could be **further developed and enhanced to share knowledge, publicise good practice and promote collaboration** between placement models and education providers. HEIs felt that the pilot placement funding application process could be improved through **allowing more time to submit applications. This could include more advanced notice of implementation timeframes** and ensuring HEIs are aware one academic year in advance to allow for timetable amendments. This would allow for **further development and testing of placement models** to ensure they are of a high quality.

---

## **7.1 Considerations for the future**

From these conclusions, we have proposed the following considerations for future pilot placement programmes:

Figure 2: Future consideration



## 8. Annex

### Annex 1 – Desk review documentation inventory



Documents in Desk  
Review.xlsx

### Annex 2 – HEIs interview topic guide



Topic guide - HEI  
Schools of Pharmacy.docx

### Annex 3 – Undergraduate pharmacists survey questionnaire



FINAL HEE  
Undergraduate pharr

### Annex 4 – Educators survey questionnaire



FINAL HEE Pharmacy  
Educator survey 04.01

### Annex 5 – Employer interviews topic guide



FINAL Topic guide -  
Employers.docx

### Annex 6 –Logic model



HEE Undergraduate  
Pharmacists Evaluation



rsmuk.com

The UK group of companies and LLPs trading as RSM is a member of the RSM network. RSM is the trading name used by the members of the RSM network. Each member of the RSM network is an independent accounting and consulting firm each of which practises in its own right. The RSM network is not itself a separate legal entity of any description in any jurisdiction. The RSM network is administered by RSM International Limited, a company registered in England and Wales (company number 4040598) whose registered office is at 50 Cannon Street, London EC4N 6JJ. The brand and trademark RSM and other intellectual property rights used by members of the network are owned by RSM International Association, an association governed by article 60 et seq of the Civil Code of Switzerland whose seat is in Zug.

RSM UK Corporate Finance LLP, RSM UK Legal LLP, RSM UK Restructuring Advisory LLP, RSM UK Risk Assurance Services LLP, RSM UK Tax and Advisory Services LLP, RSM UK Audit LLP, RSM UK Consulting LLP and RSM UK Creditor Solutions LLP are limited liability partnerships registered in England and Wales, with registered numbers OC325347, OC402439, OC325349, OC389499, OC325348, OC325350, OC397475 and OC390886 respectively. RSM UK Employer Services Limited, RSM UK Tax and Accounting Limited and RSM UK Management Limited are registered in England and Wales with numbers 6463594, 6677561 and 3077999 respectively. RSM Northern Ireland (UK) Limited is registered in Northern Ireland at Number One Lanyon Quay, Belfast, BT1 3LG with number NI642821. All other limited companies and limited liability partnerships are registered at 6th Floor, 25 Farringdon Street, London, EC4A 4AB. The UK group of companies and LLPs trading as RSM is a member of the RSM network. RSM is the trading name used by the members of the RSM network. Each member of the RSM network is an independent accounting and consulting firm which practises in its own right. The RSM network is not itself a separate legal entity in any jurisdiction. RSM UK Legal LLP is © 2022 RSM UK Group LLP, all rights reserved