

# Pharmacy Education Conference 2021

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**Virtual Conference  
15<sup>th</sup>-17<sup>th</sup> September 2021**

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**Oral Presentation: Undergraduate**

Abstract title	<b>Student Pharmacists' Perceptions of Facilitator Involvement in Competency-Based Assessments within Practice-based Experiential Learning</b>
Author list	S.A. Jacob <sup>1</sup> , A. Power <sup>2</sup> , J. Portlock <sup>3</sup> T. Jebara <sup>4</sup> , S.Cunningham <sup>4</sup> , A. Boyter <sup>1</sup>
Affiliations of authors	<sup>1</sup> Strathclyde Institute of Pharmacy and Biomedical Sciences, University of Strathclyde Email: <a href="mailto:anne.boyter@strath.ac.uk">anne.boyter@strath.ac.uk</a> (Corresponding author) <sup>2</sup> NHS Education for Scotland <sup>3</sup> School of Life Sciences, University of Sussex <sup>4</sup> Robert Gordon University
All author ORCID IDs	1. Sabrina Anne Jacob: 0000-0001-8012-7789 2. Ailsa Power: 0000-0003-4744-7571 3. Jane Portlock: 0000-0001-6705-7392 4. Tesnime Jebara: 0000-0002-6848-8845 5. Scott Cunningham: 0000-0001-9655-2245 6. Anne Boyter 0000-0002-6088-5571
Presenting author email	<a href="mailto:sabrina.jacob@strath.ac.uk">sabrina.jacob@strath.ac.uk</a>
Keywords:	Experiential learning, MPharm, pharmacy, student pharmacist, competency-based assessment
<p><b>Background:</b> The Pharmacy Additional Cost of Teaching (ACTp) (Wright, 2019) evaluation project seeks to explore the practicality of experiential learning (EL) facilitators undertaking competency-based assessments of students during EL.</p> <p><b>Aim:</b> To obtain students' perceptions of placement facilitators assessing students during their EL.</p> <p><b>Method:</b> Undergraduate MPharm students from Robert Gordon University (RGU) and the University of Strathclyde (UoS) were surveyed using an online questionnaire. It contained only one open-ended question which sought to capture their thoughts on facilitators assessing them during EL. Thematic content analysis was undertaken on the responses received.</p> <p><b>Results:</b> Eighty-two responses were received; 13 incomplete responses; 69 included: 42 UoS, 27 RGU. Favourable responses were received from 34 (49%) with regard to facilitators assessing students. Thematic content analysis revealed five key themes: (1) Current perceptions and expectations of EL placements, (2) Perceived benefits of facilitators assessing students, (3) Perceived drawbacks of facilitators assessing students, (4) Potential barriers and challenges in facilitators assessing students, and (5) Suggestions and concerns. Students were concerned about the extra stress and the impact of the assessment on their overall grades, however they acknowledged the benefits of being assessed and receiving feedback from trained practitioners in the real-world setting who would be engaged in the students' EL. Variability in marking as well as facilitators' lack of experience with assessments were also highlighted, with suggestions that facilitators should be trained in assessment and equipped with information on students' level of knowledge. Students also thought that quality assurance measures should also be adopted to ensure standardisation in marking.</p> <p><b>Discussion:</b> Students were on the whole ambivalent about the suggested approach, with concerns raised about the impact of the assessments as well as the capability of facilitators to assess them. To allay these anxieties, students should be involved as co-creators in the design and structure of the assessment components.</p>	
Reference list:	Wright, S. (2019) Scottish government invests £2.85m to expand experiential learning of student pharmacists to new settings. The Pharmaceutical Journal, March.

**Oral Presentation – Undergraduate**

Abstract title	<b>Exploring students' reasons for choosing to study pharmacy</b>
Author list	Catherine Langran <sup>1</sup> Chantelle Igwe <sup>1</sup>
Affiliations of authors	<sup>1</sup> University of Reading, Berkshire, United Kingdom
All author ORCID IDs	<u>0000-0001-5186-4528</u>
Presenting author email	<a href="mailto:c.a.langran@reading.ac.uk">c.a.langran@reading.ac.uk</a>
Keywords:	MPharm, Careers, Outreach, UCAS
<p><b>Background:</b> Recent years have seen an overall decline in pharmacy applications at UK universities (Andalo &amp; Wickware, 2018).</p> <p><b>Aim:</b> To explore what influences students' choice of studying pharmacy and choice of university.</p> <p><b>Method:</b> An online survey was distributed to undergraduate pharmacy students at the University of Reading. One-to-one interviews were undertaken with nine volunteer students. Inductive analysis of interviews was undertaken, with inter-coder reliability.</p> <p><b>Results:</b> The survey response rate was 21% (n=140). Students rated the importance of factors involved in their decision to study pharmacy (figure 1). The interviews also explained reasons for choosing pharmacy:  <i>"Coming from an African household it's kind of important to pick a job that is professional. Pick a job that gives you a good reputation, something they're proud of"</i>  Students reported being very familiar (26%), partially familiar (53%) and unfamiliar (21%) with the role of a pharmacist prior to choosing to start their degree.  <i>"I don't think enough people understand what pharmacists do... what the job can lead to, I think the best way that people would start to want to apply more for pharmacy is if they actually knew what we did."</i>  The most commonly used online sources of information were university websites (70%) and Youtube<sup>®</sup> (34%), compared to Facebook<sup>®</sup> (2%), GPhC (11%) and RPS (9%) websites.  <i>"I went on YouTube and the 'day in the life as a pharmacy student' vlogs were the best things"</i>.  The most important factor when choosing which university was the employment rates after graduation, location of university and entry grade requirements.</p> <p><b>Conclusion:</b> This study identified a need to increase promotion of the role of pharmacists and employability, especially on university web pages and in Youtube vlogs.  The study is limited by the response rate and by being conducted in one school of pharmacy.</p>	
<b>Reference list:</b>	Andalo, D. & Wickware, C. (2018). Why are pharmacy schools struggling to fill places? <i>The Pharmaceutical Journal</i> 2018. 301;7919.

**Oral presentation – Undergraduate**

Abstract title	<b>A qualitative study of students' experiences being peer teachers of the NICE Evidence Search</b>
Author list	M. McCorrison, <sup>1</sup> M-C. Kearney, <sup>1</sup> A. Weist, <sup>2</sup> L. Edgar, <sup>2</sup> J. Jefferies, <sup>2</sup> K. Burnett, <sup>3</sup> S. Haughey, <sup>1</sup> B. Girvin <sup>1</sup>
Affiliations of authors	<sup>1</sup> School of Pharmacy, Queen's University Belfast, Northern Ireland <sup>2</sup> National institute for Health and Care Excellence (NICE) <sup>3</sup> School of Pharmacy and Pharmaceutical Sciences, Ulster University, Northern Ireland
	Kathryn Burnett <a href="https://orcid.org/0000-0001-6451-5271">https://orcid.org/0000-0001-6451-5271</a>
Presenting author email	<a href="mailto:b.girvin@qub.ac.uk">b.girvin@qub.ac.uk</a>
Keywords	Peer Teaching, NICE Student Champion, NICE Evidence Search.
<p><b>Background:</b> Pharmacy students must be able to '<i>support the learning and development of others</i>' (GPhC, 2021) and peer teaching provides an opportunity to do this. In 2020, six MPharm students from Queen's University Belfast (QUB) and three from the Ulster University (UU) were trained as NICE Student Champions on how to use NICE Evidence Search (NICE, 2021) and then cascaded the training to their peers.</p> <p><b>Aim:</b> To gain feedback from students on their experiences of being peer teachers as part of the NICE Student Champion Scheme.</p> <p><b>Methods:</b> Following ethical approval, all nine Student Champions were invited to partake in semi-structured interviews on Microsoft Teams.<sup>®</sup> Interviews were audio/video recorded, transcribed verbatim and analysed thematically.</p> <p><b>Results:</b> Seven students took part. Student experiences were very positive, with themes and sub-themes shown in Table 1.</p> <p><b>Conclusion:</b> Students reported many advantages to peer teaching and the established structure of the teaching activity and training provided by NICE will help inform further peer teaching activities within the MPharm programme.</p>	
<b>Reference list:</b>	<p>General Pharmaceutical Council (2021). Standards for initial education and training of pharmacists. Available at: <a href="https://www.pharmacyregulation.org/sites/default/files/document/standards-for-the-initial-education-and-training-of-pharmacists-january-2021.pdf">https://www.pharmacyregulation.org/sites/default/files/document/standards-for-the-initial-education-and-training-of-pharmacists-january-2021.pdf</a> Accessed 27 July, 2021</p> <p>NICE (2021). NICE Student Champions. Available at: <a href="https://www.nice.org.uk/get-involved/student-champions">https://www.nice.org.uk/get-involved/student-champions</a> Accessed 27 July, 2021</p>



**Table 1: Themes and sample quotations from the NICE Student Champion interviews**

<p><b>Theme 1: Motivation</b></p> <p><b>1.1 Employability:</b>  <i>"It was just something unusual to talk about ... on my CV" [SC1]</i></p> <p><b>1.2 Opportunity:</b>  <i>"It can allow me to have early engagement with NICE." [SC6]</i></p>
<p><b>Theme 2: Preparedness</b></p> <p><b>2.1 For Professional Practice:</b>  <i>"Pharmacists .....are always doing some form of teaching- whether that's teaching your patients .....or other pharmacists." [SC7]</i></p> <p><b>2.2 Practice for Online Sessions:</b>  <i>"Having that practice was really good." [SC2]</i></p> <p><b>2.3 NICE Training:</b>  <i>"It really prepared you on how to...give the content, and what way to deliver the content." [SC3]</i></p>
<p><b>Theme 3: Transferrable Skills Development</b></p> <p><b>3.1 Communication Skills</b>  <i>"I should be able to communicate with people better" [SC5]</i></p> <p><b>3.2 Teaching Skills</b>  <i>"It's particularly applicable for when you're counselling a patient, you're teaching them how to use .. their inhaler." [SC3]</i></p>
<p><b>Theme 4: Learning medium</b></p> <p><b>4.1 Online versus Face-to-face:</b>  <i>"It would have been nice to do it face-to-face". [SC3]</i></p> <p><b>4.2 Continuity of Platforms:</b>  <i>"It would have been better if they [NICE] used Microsoft Teams because that's what we used when we were doing the cascade sessions." [SC1]</i></p> <p><b>4.3 Interaction and Engagement:</b>  <i>"We used Slido for a quiz ...it kept people engaged." [SC1]</i></p>
<p><b>Theme 5: Peer Teaching</b></p> <p><b>5.1 Mutual Learning environment:</b>  <i>"We're learning and our peers are learning so it's...a mutual learning environment." [SC4]</i></p> <p><b>5.2 Future Perspectives:</b>  <i>"Everyone should be given the chance to do this" [SC4]</i></p>

**Key**

SC: Student Champion

## Poster – Undergraduate

Abstract title	<b>Surviving the pitfall of learning biology and physiology: ‘Start Strong’ and ‘Stay Strong’ !</b>
Author list	S. Amadesi <sup>1</sup> , J. Gunner <sup>1</sup> , B. Stoyanova <sup>1</sup>
Affiliations of authors	<sup>1</sup> University of Reading, School of Pharmacy, Reading , United Kingdom
Presenting author email	<a href="mailto:s.amadesi@reading.ac.uk">s.amadesi@reading.ac.uk</a>
Keywords	Biology, physiology, pharmacy, support, difficulties, learning needs, learning tool
<p><b>Background:</b> Biology and physiology topics are the foundations of the Master of Pharmacy (MPharm) degree. It was noticed that ~20% of year1-MPharm students, failed the biology and physiology-focused module. Understanding what are the challenges encountered by year 1 students when learning, and what type of support they may need to improve their achievements, is essential to ensure academic success (Brooker, Brooker and Lawrence, 2017).</p> <p><b>Aims:</b> To conduce focus group discussions with MPharm-students and gain un in-depth understanding of students’ difficulties and learning needs, as well as views and preferences in relation to learning tools required when learning biology and physiology topics.</p> <p><b>Method:</b> 2 multiple-category design focus group discussions were organised with 3 year1, 3 year2 and 1 year3 MPharm-students. A ‘<i>topic guide</i>’, with prompting questions, was used to structure the discussions that were recorded, transcribed, synthesized and then analysed by thematical analysis (Office of Institutional Research, Effectiveness, and Planning, 2005).</p> <p><b>Results:</b> After coding the participants’ responses, the following major themes were identified: ‘<i>Year1 challenges</i>’, ‘<i>Delivery of content</i>’, and ‘<i>Tools</i>’. In particular, the ‘<i>lack of pre-knowledge</i>’ on some of the topics, difficulties in ‘<i>appreciating the learning objectives</i>’ and adapting to the ‘<i>pace of delivery</i>’ of the lectures, where among the major struggles experienced by students. On the other hand, the use of lecture’s screencasts, videos, tutorials and formative online assessments, were highlighted as beneficial learning tools.</p> <p><b>Conclusion:</b> Adapting to different teaching approaches and managing workload, seemed the major challenges encountered by students. Managing students’ expectations, at the start of university journey, may be important to support academic transition and improve students’ engagement and thus their overall experience. The use of technology and interactive sessions, and the introduction of formative assessments should be considered to support students’ learning and thus improve their academic achievements.</p>	
Reference list:	<p>Brooker A., Brooker S., and Lawrence J (2017). ‘First year students’ perceptions of their difficulties’, <i>Student Success</i>, 8(1), pp 49-62. Available at: <a href="https://studentsuccessjournal.org/article/view/492">https://studentsuccessjournal.org/article/view/492</a>. (Accessed: 12 May 2021)</p> <p>Office of Institutional Research, Effectiveness, and Planning (2005). <i>Guidelines for Conducting a Focus Group</i>. Available at: <a href="https://irep.olemiss.edu/wp-content/uploads/sites/98/2016/05/Trinity_Duke_How_to_Conduct_a_Focus_Group.pdf">https://irep.olemiss.edu/wp-content/uploads/sites/98/2016/05/Trinity_Duke_How_to_Conduct_a_Focus_Group.pdf</a>. (Accessed: 12 May 2021)</p>

**Poster – Undergraduate**

Abstract title	<b>Working with students in partnership to design an E-portfolio for use on the MPharm degree.</b>
Author list	Samuel Bizley
Affiliations of authors	University of Reading, Reading, United Kingdom
All author ORCID IDs	<a href="https://orcid.org/0000-0002-4971-777X">https://orcid.org/0000-0002-4971-777X</a>
Presenting author email	<a href="mailto:s.c.bizley@reading.ac.uk">s.c.bizley@reading.ac.uk</a>
Keywords	Student partnerships, E-portfolios, digital design.
<p><b>Background:</b> The University of Reading introduced a conventional paper-based portfolio in 2014, for MPharm students (years 1-3) to record achievements, placement/inter professional education (IPE) completion, continuing professional development (CPD) records detailing self-directed work contributing to the development of clinical, educational and citizenship skills or knowledge, and reflective accounts which feeds into a summative assessment in part 3, where all folder entries are marked and understanding is adjudged with an oral viva. With a move to digital record keeping in line with current GPhC CPD online submission requirements (GPhC, 2018), academics in partnership with current MPharm students and technology enhanced learning (TEL) chose to design, develop, and test a bespoke VLE integrated E-portfolio to replace the current paper-based version, and undertake a feasibility study for its inclusion in the MPharm programme.</p> <p><b>Description of work:</b> An initial student evaluation of the current portfolio was carried out as part of a module review, this feedback highlighted a preference to move to an electronic platform motivated by current barriers to the completion of the paper portfolio, including; ease of access, security of data, updatability, cost, and environmental impact. Twenty current MPharm students were then recruited to design, build, and test an E-portfolio template using current VLE tools. Recruited students were assigned to either a 'design' or 'evaluation' team based on self-evaluation of computing skills. A feedback cycle was then implemented whereby the academic lead design team built the bespoke E-portfolio framework within the VLE, which was subsequently tested and reviewed by the evaluation team (Cathcart et al., 2014). After each cycle, a focus group brought both teams together exploring the usability of the tool, resulting in two further feedback cycles and final optimisation, resulting in a completed E-portfolio product.</p> <p><b>Proposed evaluation:</b> The E-portfolio has been implemented into part 1 of the MPharm, students are encouraged to offer opinions throughout its implementation, and raise any issues for troubleshooting, with end of year module evaluations monitored for comments, allowing continuous improvements to be made. Final evaluation of the tool is planned using a questionnaire upon the final submission of the E-portfolios in part 3, The questionnaire will explore the challenges and successes of the electronic platform using 'open' and 'Likert scale' questions with results evaluated by quantitative and qualitative (Thematic) analysis.</p>	
Reference list:	<p>General Pharmaceutical Council. (2018). Revalidation framework. Available at:<a href="https://www.pharmacyregulation.org/sites/default/files/document/gphc_revalidation_framework_january_2018.pdf">https://www.pharmacyregulation.org/sites/default/files/document/gphc_revalidation_framework_january_2018.pdf</a> Accessed 16 July 2021</p> <p>Cathcart, A., Greer, D. &amp; Neale, L. (2014). Learner-focused evaluation cycles: facilitating learning using feedforward, concurrent and feedback evaluation. <i>Assessment &amp; Evaluation in Higher Education</i>, 39, 790-802.</p>

**Poster – Undergraduate**

Abstract title	<b>Counselling triplets: introducing peer learning into professional practice classes</b>
Author list	Helen Boardman and Vibhu Solanki
Affiliations of authors	University of Nottingham, United Kingdom
All author ORCID IDs	Helen Boardman <a href="https://orcid.org/0000-0002-5341-5619">https://orcid.org/0000-0002-5341-5619</a> Vibhu Solanki <a href="https://orcid.org/0000-0001-6069-9755">https://orcid.org/0000-0001-6069-9755</a>
Presenting author email	<a href="mailto:Helen.boardman@nottingham.ac.uk">Helen.boardman@nottingham.ac.uk</a>
Keywords	Counselling skills, peer learning
<p><b>Background:</b> Peer learning is well recognised to promote skills such as team working, reflection and identification of learning needs (Boud, Cohen and Sampson 1999). For our professional practice classes we introduced student triplet counselling skills practise where groups of three students learn from others' performance and a facilitated feedback discussion.</p> <p><b>Objective/Aim:</b> To evaluate student views of triplet counselling</p> <p><b>Design/Method/Methodology:</b> Students completed a questionnaire about their views of counselling triplets after their first experience. Questionnaire responses were entered into SPSS for analysis which consisted frequency counts with percentages and open questions were analysed thematically.</p> <p><b>Results:</b> 60 year 1 and 81 year 2 students completed the questionnaire (39% response), 70% (n=98) were female. Almost all students (99%, n=193) agreed that developing their communication skills was essential to their future practice. Despite one third of students (36%, n=50) reported concern about demonstrating their communication skills in front of peers, most (77% n=108) reported being comfortable discussing their skills with peers. Sharing feedback with peers was report to benefit their learning by 91% (n=128) of students with a similar number (86%, n=124) reporting that working in this way improved their communication skills. New ideas about communication skills and building confidence were identified as the key benefits in the open questions, although some did report that they felt pressure to do well in their consultations and were concerned about how the others might react to the feedback they gave.</p> <p><b>Discussion:</b> Students reported clear benefits to their learning in working with peers, despite some concerns about practising in front of other students. Whilst the comparatively low response rate means it is unknown whether this reflects the views of the wider student body, the positive response to the initiative meant that we retained this for our students across all years of professional practice teaching.</p>	
Reference list:	Boud, D., Cohen, R. and Sampson, J. (1999) Peer learning and assessment. <i>Assessment &amp; Evaluation in Higher Education</i> 24 (4), 413-426.

## Poster – Undergraduate

Abstract title	<b>'Narrowing the Gap' – Supplementary Chemistry Tutorials for non A-level students of Pharmacy</b>
Author list	Heather Coleman
Affiliations of authors	School of Pharmacy and Pharmaceutical Sciences, Ulster University, Coleraine, BT52 1SA, Northern Ireland.
All author ORCID IDs	<a href="https://orcid.org/0000-0002-6482-5787">https://orcid.org/0000-0002-6482-5787</a>
Presenting author email	<a href="mailto:h.coleman@ulster.ac.uk">h.coleman@ulster.ac.uk</a>
Keywords	widening access, first year MPharm, supplementary Chemistry tutorials
<p><b>Background:</b> As student cohorts become larger and more diverse, there is a need to comprehend how to engage and support all students. Ulster University is a “civic university”, encouraging “a diverse university community” (2021). MPharm students entering on the non-traditional route of A levels, i.e. Leaving certificate, Access Courses, BTEC or an international qualification can struggle with the Chemistry content in the first semester of first year. This has been reflected in the exam results and through feedback from students.</p> <p><b>Aim:</b> To implement supplementary Chemistry Tutorials for students struggling with the Chemistry component of a first semester first year module</p> <p><b>Method:</b> Subject areas within the A level syllabus were identified and aligned with the first year, first semester module chemistry components. A questionnaire was devised to determine what the needs were and distributed to all first year students at the start of semester. The tutorials covered an A level Chemistry Factfile each week. A PhD student with a strong background in Chemistry took the tutorials. The academic staff member met with the PhD student twice a week to discuss material to be covered and any feedback from students. The academic also worked closely with students to understand the problem areas through informal discussions, minute papers at the end of each of the tutorials and teaching assessment questionnaires at the end of semester. The number of students attending varied each week from 5-15 (from a class of 35 students).</p> <p><b>Results:</b> Based on the feedback from students, the PhD tutor and the exam results, the extra Chemistry Tutorials were deemed a success. The fail rate for the Module exam decreased significantly from 21.3% to 6.1% in the academic year after implementation.</p> <p><b>Conclusion:</b> Due to the success of the tutorials, they have become part of the practice within the first year cohort. This practice is transferrable as Chemistry in another School or as a different subject area such as Mathematics which is frequently seen as a challenge in teaching first year students across numerous disciplines (Anderton et al, 2017).</p>	
Reference list:	<p>Anderton, R., Hine, G. and Joyce, C. (2017) Secondary School mathematics and science matters: Academic performance for secondary students transitioning into university allied health and sciences courses, <i>International Journal of Innovation in Science and mathematics Education</i>, <b>25</b> (1), 34-37.</p> <p>Ulster.ac.uk. (2021). <i>fiveandfifty</i>. [online] Available at: <a href="https://www.ulster.ac.uk/fiveandfifty/home">https://www.ulster.ac.uk/fiveandfifty/home</a> [Accessed 1 April 2021].</p>

**Poster – Undergraduate**

Abstract title	<b>Action required: an analysis of MPharm student protected characteristics data reveals females outperform males.</b>
Author list	Lezley-Anne Hanna, Sharon Haughey, Paul McCague, Maurice Hall L-A. Hanna, S. Haughey, P. McCague, M.Hall
Affiliations of authors	Queen's University Belfast, United Kingdom
All author ORCID IDs	Lezley-Anne Hanna: <a href="https://orcid.org/0000-0003-3477-7152">https://orcid.org/0000-0003-3477-7152</a> Maurice Hall: <a href="https://orcid.org/0000-0002-4905-0012">https://orcid.org/0000-0002-4905-0012</a>
Presenting author email	<a href="mailto:l.hanna@qub.ac.uk">l.hanna@qub.ac.uk</a>
Keywords	Academic performance, Protected characteristics, Pharmacy students, Progression
<p><b>Background:</b> In recent years, many organisations including the General Pharmaceutical Council have placed great importance on equality, diversity, and inclusion (General Pharmaceutical Council, 2021). This is timely given differences in attainment for their registration assessment (Robinson, 2018).</p> <p><b>Aims:</b> To determine, from protected characteristics data (i.e., disability, age, sex, race) whether differences existed in Queen's University Belfast MPharm student progression and academic performance.</p> <p><b>Method:</b> Available de-identified data were requested and obtained from the central university in November 2020 in relation to MPharm student degree classification and progression. Data analysis mainly took the form of descriptive statistics such as frequencies and percentages.</p> <p><b>Results:</b> Data from the last three academic years were included in the analysis (i.e. 2017/18, 2018/19 and 2019/20). Student numbers were small for disability (1 in 2017/18 graduates, 3 in 2018/19 graduates and 6 in 2019/20 graduates), age outside the 18–20-year-old range, and race other than White or Asian. In all cohorts, a higher proportion of males were required to repeat modules than females and a higher proportion of females obtained first class honours degree classifications (54.3% females versus 29.6% males in 2017/18, 59.5% females versus 30.4% males in 18/19, and 66.2% females versus 37.1% males in 19/20).</p> <p><b>Conclusion:</b> While small numbers and limited data made it difficult to reach meaningful conclusions, differences appear to exist for sex. An action plan has since been developed to address these differences and includes increasing the number of male role models and support staff, having an emphasis on male mental health, including male student reflections in teaching material for future cohorts, and ensuring there is a broad range of appropriate teaching and assessment approaches in the degree programme. Lastly, we hope this work provides an impetus for others to follow our approach in their own context.</p>	
Reference list:	<p>General Pharmaceutical Council (2021). Annual report 2020-21, p26-29: Available at: <a href="https://www.pharmacyregulation.org/sites/default/files/document/gphc-annual-report-2020-21.pdf">https://www.pharmacyregulation.org/sites/default/files/document/gphc-annual-report-2020-21.pdf</a> Accessed 17 July, 2021</p> <p>Robinson, J. (2018). Black African pharmacy students still least likely to pass GPhC prereg exam. <i>Pharmaceutical Journal</i>, <b>301</b>(7917). DOI:10.1211/PJ.2018.20205438.</p>

**Poster – Undergraduate**

Abstract title	<b>Who am I? Opinions of Year 2 students on professional identity</b>
Author list	Mary-Carmel Kearney <sup>1</sup> , Joanne Brown <sup>2</sup> , Fiona Hughes <sup>1</sup> .
Affiliations of authors	1. School of Pharmacy, Queen’s University, Belfast, United Kingdom 2. Northern Health and Social Care Trust., United Kingdom
Presenting author email	<a href="mailto:Mary-carmel.kearney@qub.ac.uk">Mary-carmel.kearney@qub.ac.uk</a>
Keywords	Professional identity, transition, professionalism, patient-centred workshop
<p><b>Background:</b> Professional identity (PI) formation is of increasing interest amongst healthcare professional educators. There is no agreed definition of PI but it is considered to be a multifaceted interaction between an individual’s perception of themselves and their career (Vivekananda-Schmidt, Crossley and Murdoch-Eaton, 2015). It has been reported that students with a strong sense of PI can transition more readily into the workplace and tend to have greater self-confidence in fulfilling the requirements of their role, particularly more complex and uncertain aspects of practice (Noble et al., 2014). In pharmacy education the concept of PI is more pertinent than ever as the profession evolves at pace without clear evidence of how to develop PI.</p> <p><b>Aim:</b> To explore opinions of Year 2 students on PI, the aspects of the MPharm degree programme that make them feel most like a pharmacist and to evaluate the impact of a novel patient-centred workshop on PI development.</p> <p><b>Methods:</b> Year 2 MPharm students at Queen’s University Belfast (QUB) attended a novel patient-centred workshop. Pre- and post-workshop questionnaires were administered to explore students’ understanding of PI. Questionnaire content was informed by review of relevant literature (e.g. Crossley and Vivekananda-Schmidt, 2009) and the MPharm at QUB to construct appropriate questions that would meet the aims of the study. Data was analysed primarily by descriptive statistics. Responses from opened-ended questions were thematically analysed.</p> <p><b>Results:</b> Response rates to the pre-workshop and post-workshop questionnaires were 94.79% (91/96) and 92.71% (89/96), respectively. Presented in Table 1. are five themes that emerged from responses to the question ‘What does professional identity mean in your opinion?’ Students indicated that classes centred on patients made them ‘feel more like a pharmacist’ whereas those based in a laboratory did not. Over 95% of students agreed that the workshop had a positive impact on their PI development.</p> <p><b>Conclusion:</b> Year 2 MPharm students at QUB have varying perceptions of what PI identity means. The majority of students report that they have started to develop a sense of PI and this is particularly facilitated by patient and profession specific learning opportunities.</p>	
Reference list:	<p>Crossley, J., &amp; Vivekananda-Schmidt, P. (2009). The development and evaluation of a Professional Self Identity Questionnaire to measure evolving professional self-identity in health and social care students. <i>Medical Teacher</i>, <b>31</b>, e603–7.</p> <p>Noble, C., O’Brien, M., Coombes, I., Shaw, P.N., Nissen, L., &amp; Clavarino, A. (2014). Becoming a pharmacist: Students’ perceptions of their curricular experience and professional identity formation. <i>Currents in Pharmacy Teaching and Learning</i>, <b>6</b>, 327–39.</p> <p>Vivekananda-Schmidt, P., Crossley, J., &amp; Murdoch-Eaton, D. (2015). A model of professional self-identity formation in student doctors and dentists: a mixed method study. <i>BMC Medical Education</i>; <b>15</b>: 83.</p>

**Table 1.** Themes and sampler quotations on students' response to 'What does professional identity mean to you?' (n = 69)

Theme number	Theme title	Exemplar quotation
1	Attitude, behaviour and values	<i>"It means having a broad and good knowledge about your career, having good attitude and behaviour while consulting customers/patients and being responsible for what you're doing."</i> [S1]
2	Knowledge, skills and experience	<i>"The ability of having good knowledge in the field you're working in and being able to communicate it well"</i> [S65]
3	Interaction with and perception of others	<i>"The role you provide to the patient as you work as part of a multidisciplinary team."</i> [S35]
4	Person and role	<i>"With respect to pharmacy - the idea that pharmacy is an important part of life/more than just career"</i> [S34]
5	Unsure	<i>"Not too sure"</i> [S12]



**Poster – Undergraduate**

Abstract title	<b>A comparison of student perceptions of peer teaching by NICE Champions when delivered online versus face-to-face</b>
Author list	T. Kurani, <sup>1</sup> M-C. Kearney, <sup>1</sup> S. Greene, <sup>1</sup> A. Weist, <sup>2</sup> L. Edgar, <sup>2</sup> J. Jefferies, <sup>2</sup> Y. Hsia, <sup>1</sup> B. Girvin. <sup>1</sup>
Affiliations of authors	<sup>1</sup> School of Pharmacy, Queen’s University Belfast, Northern Ireland <sup>2</sup> National Institute for Health and Care Excellence (NICE)
Presenting author email	<a href="mailto:b.girvin@qub.ac.uk">b.girvin@qub.ac.uk</a>
Keywords	Peer Teaching, NICE Student Champion, Online Learning, Face-to-Face Learning
<p><b>Background:</b> The School of Pharmacy at Queen’s University Belfast has been partnered with the NICE Student Champion Scheme since 2011 (NICE, 2021). In 2019 and 2020 Champions from year-3 received training from NICE on how to use Evidence Search and cascaded this training to other students in their year group. The cascade training was face-to-face in 2019 and online in 2020 due to the pandemic.</p> <p><b>Aim:</b> To compare student perceptions of being taught by their peers online versus face-to-face.</p> <p><b>Methods:</b> Following ethical approval, a paper questionnaire was distributed to year-3 MPharm students (2020 cohort, n= 94) assessing their opinions of being trained via Microsoft Teams® on the NICE Evidence Search by their peers. It comprised mainly closed questions incorporating a five-point Likert scale to measure level of agreement to statements regarding the training. Answers were compared to those provided in a similar questionnaire distributed the previous year (2019 cohort, n=88), who were trained face-to-face. Descriptive analyses were performed using SPSS software. The Mann Whitney U test was performed to detect significant differences (<math>P \leq 0.05</math>) between the two cohorts.</p> <p><b>Results:</b> Questionnaire response rates were 97% (2020 cohort) and 77% (2019 cohort). Statistically significant differences were found between cohorts for agreement with statements such as finding the workshop enjoyable and being a beneficial use of time (Table 1), with students being in favour of the face-to-face teaching. However, the 2020 cohort were more strongly in agreement with statements suggesting the training should occur earlier in the curriculum.</p> <p><b>Conclusion:</b> This study supports the incorporation of more peer teaching into the MPharm degree. This is in keeping with recommendations that students ‘<i>support the learning and development of others</i>’ (GPhC, 2021). Students prefer peer teaching to be face-to-face. Should online training be mandatory, there is potential to explore how it could be made more interesting and enjoyable for students.</p>	
Reference list:	<p>General Pharmaceutical Council (2021). Standards for initial education and training of pharmacists. Available at: <a href="https://www.pharmacyregulation.org/sites/default/files/document/standards-for-the-initial-education-and-training-of-pharmacists-january-2021.pdf">https://www.pharmacyregulation.org/sites/default/files/document/standards-for-the-initial-education-and-training-of-pharmacists-january-2021.pdf</a> Accessed 27 July, 2021</p> <p>NICE (2021). NICE Student Champions. <a href="https://www.nice.org.uk/get-involved/student-champions">https://www.nice.org.uk/get-involved/student-champions</a> accessed 27 July, 2021</p>

**Table 1: Statements where statistically significant differences occurred in mean Likert scores between the 2020 (online teaching) versus the 2019 (face-to-face teaching) cohorts**

Statement	*Mean Likert score 2019 ( $\pm$ SD) (n=68)	*Mean Likert score 2020 ( $\pm$ SD) (n=91)	P value
I found the workshop enjoyable	4.03 $\pm$ 0.73 (n=68)	3.65 $\pm$ 0.88 (n=91)	0.01
I think that it was necessary for the workshop to be compulsory	3.96 $\pm$ 0.93 (n=68)	3.45 $\pm$ 1.13 (n=91)	0.008
I would have attended the workshop even if it had been optional	3.68 $\pm$ 1.19 (n=67)	3.16 $\pm$ 1.13 (n=91)	0.002
The workshops were timetabled for an appropriate length of time	4.37 $\pm$ 0.62 (n=68)	4.02 $\pm$ 0.93 (n=91)	0.041
The workshop was a beneficial use of my time	4.26 $\pm$ 0.58 (n=68)	3.67 $\pm$ 1.01 (n=91)	<0.001
Level 3 is the most beneficial year to receive this training	4.04 $\pm$ 0.93 (n=68)	3.30 $\pm$ 1.17 (n=91)	<0.001
Having knowledge of NICE Evidence Search tool in Level 1 and Level 2 would have been useful	3.43 $\pm$ 1.05 (n=68)	3.75 $\pm$ 1.08 (n=91)	0.047
I will use the NICE Evidence Search tool when I am qualified as a pharmacist	4.44 $\pm$ 0.76 (n=68)	4.08 $\pm$ 1.04 (n=90)	0.048
The peer teachers were easy to understand	4.46 $\pm$ 0.74 (n=68)	4.18 $\pm$ 0.85 (n=91)	0.032
The peer teachers made the workshop an interesting and enjoyable experience	4.25 $\pm$ 0.85 (n=68)	4.01 $\pm$ 0.82 (n=91)	0.049
I feel it would be useful to incorporate more peer teaching into the pharmacy degree programme	3.85 $\pm$ 0.86 (n=68)	3.27 $\pm$ 1.18 (n=91)	0.003

**KEY**

\* Where 1 is strongly disagree with, and 5 is strongly agree with the statement.

SD: Standard Deviation

n = the number of students who answered each question. Total number of respondents in 2019 cohort was 68 and total number of respondents in 2020 cohort was 91.

## Poster – Undergraduate

Abstract title	<b>Factors influencing Chinese students' and parents' preferences for studying articulated pharmacy programmes in the United Kingdom</b>
Author list	Chiu-Yi Lin <sup>1</sup> , Xin Li <sup>2</sup> , Sarah C. Willis <sup>1</sup> , Li-Chia Chen <sup>1</sup>
Affiliations of authors	<sup>1</sup> Division of Pharmacy and Optometry, School of Health Sciences, Faculty of Biology, Medicine and Health, University of Manchester, Manchester, United Kingdom  <sup>2</sup> School of Pharmacy, Nanjing Medical University, Nanjing, China
All author ORCID IDs	Chiu-Yi Lin <a href="https://orcid.org/0000-0002-0302-6535">https://orcid.org/0000-0002-0302-6535</a> Xin Li <a href="https://orcid.org/0000-0003-3951-8061">https://orcid.org/0000-0003-3951-8061</a> Sarah C. Willis <a href="https://orcid.org/0000-0002-0368-0684">https://orcid.org/0000-0002-0368-0684</a> Li-Chia Chen <a href="http://orcid.org/0000-0002-6158-6645">http://orcid.org/0000-0002-6158-6645</a>
Presenting author email	<a href="mailto:chiu-yi.lin@manchester.ac.uk">chiu-yi.lin@manchester.ac.uk</a>
Keywords	Undergraduate pharmacy education; international programmes; Chinese students; articulated pharmacy curriculum
<p><b>Background:</b> In the past two decades, international articulated pharmacy programmes have increasingly been offered by higher education institutions in China (Coverdale-Jones, 2013). Articulated programmes involve a formal agreement between two institutions; students beginning their degree programme at one university before transferring to a similar programme at another university (Zhong, 2020). However, little is known about students' and their parents' views about articulated international programmes.</p> <p><b>Aims:</b> To explore Chinese high school students' and their parents' preferences regarding different models of articulated curriculum design and the factors influencing their preferences.</p> <p><b>Method:</b> A survey was conducted in Jiangsu province in China in July-September 2020 using self-reported questionnaires capturing preferences for different articulated programme models and factors influencing this. A purposive sample of high school students (n=2069) who took or will take the National College Entrance Examination in 2020 or 2021 and their parents (n=1576) were recruited at university fairs or by researchers' networks. The association between participants' preference for different programme and associated personal and institutional factors (Klahr, 2000) was analysed using descriptive and logistic regression.</p> <p><b>Results:</b> Overall, 1,751 students and 1,339 parents completed a survey. Univariate analysis showed all factors were associated with preferences for articulated programmes. The multivariate analysis found some factors that dominated decision-making on choices for the various durations of overseas study. Students' decisions were mainly driven by academic performance, benefit to future careers, and additional degrees. However, parents' choice was driven by student intentions, improved language skills, and an additional degree (<b>Table 1</b>).</p> <p><b>Discussion:</b> This is the first study to investigate Chinese students' and their parents' perceptions on choosing articulated programmes. The results provide insights to inform further development of pharmacy articulated programmes for Chinese students. A dual degree award is regarded as an added value. Further career development is also an attractive point for students.</p>	
Reference list	Coverdale-Jones T. Transnational Higher Education in the Asian Context. London: Palgrave Macmillan, 2013.  Klahr SC, Ratti U. Increasing Engineering Student Participation in Study Abroad: A Study of U.S. and European Programs. <i>Journal of Studies in International Education</i> 2000;4(1):79-102. doi: 10.1177/102831530000400106  Zhong R, Chen Y, Wang D, et al. Study on cross-cultural adaptability of students of articulation program—taking chinese students studying abroad at Harding University in the US as an example. <i>Open Journal of Social Sciences</i> 2020;8:56-70. doi: 10.4236/jss.2020.812006

**Table 1. Factors significantly associated with participants' choices on various international articulation programmes**

Participants	High school students			Parents of high-school students		
	Type of articulation programmes	2+2 year	3+1 year	4+1 year	2+2 year	3+1 year
Academic performance	2.01 (1.40, 2.87)	1.75 (1.21, 2.53)	1.84 (1.30, 2.61)	-	1.68 (1.15, 2.46)	1.73 (1.19, 2.52)
Parents' supportive attitude	-	2.26 (1.56, 3.26)	-	1.75 (1.26, 2.44)	1.72 (1.22, 2.41)	2.34 (1.67, 3.28)
Student intention	-	-	-	0.66 (0.46, 0.94)	-	0.59 (0.41, 0.85)
The cost	1.68 (1.17, 2.41)	1.65 (1.13, 2.40)	1.77 (1.24, 2.52)	-	-	-
The benefits of study abroad experience to your future career	-	-	-	1.58 (1.04, 2.40)	1.63 (1.06, 2.50)	-
Improvement in language skills	2.21 (1.56, 3.11)	1.95 (1.37, 2.79)	1.91 (1.37, 2.67)	2.49 (1.68, 3.71)	-	2.35 (1.59, 3.48)
An additional degree	-	-	0.71 (0.55, 0.92)	-	-	-
Cultural differences	-	-	-	-	-	-

(Note) The articulation programmes vary in the duration studying in two institutes. This table presents the statistically significant results ( $p < 0.05$ ) of the multivariate logistic regression analysis in odds ratios (OR) with 95% confidence intervals (95%CI). Other factors with no significant difference, i.e., independent living skills, family's financial situation, university's reputation, subject ranking, teaching quality and facilities, official language of the destination country, location of the destination country, and security of the destination country are not presented in this table.

Poster – Undergraduate

Abstract title	<b>Development of educational games to improve student engagement</b>
Author list	Deborah Lowry
Affiliations of authors	Ulster University, Coleraine, United Kingdom
All author ORCID IDs	0000-0003-3919-7456
Presenting author email	d.lowry@ulster.ac.uk
Keywords	Engagement, educational games, co-design
<p><b>Background:</b> Active learning puts students at the heart of their learning experience enabling them to become more engaged with their own learning building knowledge through their own experiences (Lee et al, 2018). Staff-student partnerships have been shown to enhance educational practice and have students taking a more active role in decision-making. Educational escape rooms are effective pedagogical tools used to develop students' knowledge and skills and have been positively received by students, increasing knowledge and serving as a platform for teamwork (Cain, 2019). The aim of the study is to improve student engagement and learning experiences within an online drug delivery module by co-designing educational games</p> <p><b>Description of work:</b> This study involved third year MPharm students at Ulster University. Student opinions on online delivery specifically the the use of lecture recordings, online synchronous sessions and having to manage their own time was gathered using questionnaires and consultations. Co-design sessions were conducted which involved students indicating parts of lectures they thought were important for understanding of the topics. Questions were developed by students which were then further developed by staff into clues and hints which would be suitable for an escape room requiring understanding of material and application of knowledge to progress.</p> <p><b>Proposed evaluation:</b> Ongoing development of questions/clues is continuing with co-design sessions to ensure development of escape rooms that improve student understanding of complicated concepts and also to make them fun which should improve engagement with the lecture material. Evaluation of the escape rooms will be conducted by students playing the games and providing feedback as to what areas could be improved. A comparison of engagement with the learning materials on Blackboard Learn before and after the use of escape rooms will indicate if engagement has improved. Also comparison of grades before and after will indicate if understanding of theories has improved and learning objectives have been covered.</p>	
Reference list:	<p>Cain, J. (2019) Exploratory implementation of a blended format escape room in a large enrollment pharmacy management class. <i>Currents in Pharmacy Teaching and Learning</i>, <b>11</b>(1), 44-50.</p> <p>Lee, C.Y., White, P.J. and Malone, D.T. (2018) Online Educational Games improve the learning of cardiac pharmacology in undergraduate pharmacy teaching. <i>Pharmacy Education</i>, <b>18</b>(1), 298-302.</p>

## Poster – Undergraduate

Abstract title	<b>Spoken propositional idea density, a measure to help second language English speaking students and level the field: a multicentre cohort study</b>
Author list	Andrew M. Lunn <sup>1*</sup> , Daniel Matthias Bürkle <sup>2</sup> , Rebecca Ward <sup>1</sup> , Alice P. McCloskey <sup>3</sup> , Adam Rathbone <sup>4</sup> , Aaron Courtenay <sup>5</sup> , Rachel Mullen <sup>3</sup> and Andrea Manfrin <sup>1</sup>
Affiliations of authors	<ol style="list-style-type: none"> <li>1. Pedagogic Interest Group, School of Pharmacy and Biomedical Sciences, The University of Central Lancashire, Preston, PR1 2HE, UK</li> <li>2. School of Humanities, Language and Global Studies, The University of Central Lancashire, Preston, PR1 2HE, UK</li> <li>3. School of Pharmacy and Biomolecular Sciences, Liverpool John Moores University, Liverpool L3 2AJ, UK</li> <li>4. School of Pharmacy, Newcastle University, Newcastle, NE1 7RU, UK</li> <li>5. School of Pharmacy and Pharmaceutical Sciences, Ulster University, Cromore Road, Coleraine, BT52 1SJ, UK</li> </ol>
All author ORCID IDs	<p>Andrew Lunn: 0000-0003-2884-2755  Alice McCloskey: 0000-0003-3014-1624  Adam Rathbone: 0000-0002-1005-0533  Aaron Courtenay: 0000-0002-2651-7839  Rachel Mullen: 0000-0002-5528-0332  Andrea Manfrin: 0000-0003-3457-9981</p>
Presenting author email	<a href="mailto:Alunn@uclan.ac.uk">Alunn@uclan.ac.uk</a>
Keywords	Attainment differential, international students, psycholinguistics, EDI, idea/concept density
<p><b>Background:</b> Idea density is defined as the number of propositions used divided by the total words in either spoken or written text. It has been shown to influence comprehension time; potentially differently in first and second language speakers (Bloomfield et al., 2010).</p> <p><b>Objective/Aim:</b> This study aimed to determine the effect of spoken idea density on undergraduate student comprehension in first and second language English speakers.</p> <p><b>Design/Method/Methodology:</b> Students watched two online lectures, subsequently answering ten multiple choice questions on them. Students received two lectures and were randomly assigned to have one of these more idea dense (MID) and one less idea dense (LID). Other than ID, equivalent lectures used the same slides, lasted similar times and were presented at similar syllables per minute.</p> <p><b>Results:</b> Seventy-five undergraduate students across four UK pharmacy departments completed the study, achieving a higher median score after an LID lecture (LID=7(3), MID=6(3), P=0.04). Of these, 63 were first language and 12 second language speakers. Artificial neural network models revealed language as the main predictor of exam performance. The odds ratio (OR) of obtaining ≥70% after MID lectures was six-time higher for the first language versus second language English speakers (OR=5.963, 95% CI 1.080-32.911, P=0.041). The OR was not significant when receiving LID lectures (OR=2.298, 95% CI 0.635-8.315, P=0.205). Second language speakers benefited from receiving LID instead of MID lectures, achieving a 10.8% score increase versus a 3.2% increase obtained by first language speakers.</p> <p><b>Discussion:</b> Whilst our results are significant, the sample size is small and not equally distributed between first and second language speakers. However, the propositional idea density of lectures has been shown to directly influence students' comprehension, and disproportionately for second language speakers; revealing the possibility of reduced spoken idea density in levelling the attainment differential between first and second language speakers on pharmacy courses in the UK.</p>	
Reference list:	Bloomfield, A., Wayland, S. C., Rhoades, E., Blodgett, A., Linck, J. & Ross, S. (2010). What makes listening difficult? Factors affecting second language listening comprehension. <i>Maryland univ. college park</i> .

**Poster – Undergraduate**

Abstract title	<b>A questionnaire-based study to investigate future pharmacists' views on over-the-counter medicines, including their place within evolving pharmacy practice.</b>
Author list	Alana Murphy, Lezley-Anne Hanna, Maurice Hall A. Murphy, L-A. Hanna, M. Hall
Affiliations of authors	Queen's University Belfast, United Kingdom
All author ORCID IDs	Alana Murphy: does not have an ORCID ID Lezley-Anne Hanna: <a href="https://orcid.org/0000-0003-3477-7152">https://orcid.org/0000-0003-3477-7152</a> Maurice Hall: <a href="https://orcid.org/0000-0002-4905-0012">https://orcid.org/0000-0002-4905-0012</a>
Presenting author email	<a href="mailto:amurphy77@qub.ac.uk">amurphy77@qub.ac.uk</a> <a href="mailto:l.hanna@qub.ac.uk">l.hanna@qub.ac.uk</a>
Keywords	Over-the-counter medicines, Pharmacy students, Questionnaire
<p><b>Background:</b> Facilitating self-care is an important role for pharmacists worldwide, as evidenced by the International Pharmaceutical Federation's digital programme (International Pharmaceutical Federation, 2021). Moreover, wider access to medicines can be achieved through the deregulation of prescription-only medicine (POM) to over-the-counter (OTC) medicine status.</p> <p><b>Aims:</b> To ascertain final year pharmacy students' views on OTC medicines and consultations.</p> <p><b>Method:</b> Following ethical approval and an email invitation to participate, data about OTC medicines and consultations were collected from consenting students at Queen's University Belfast via a pre-piloted paper-based questionnaire (November 2020). Data were coded and analysis mainly took the form of descriptive statistics. Non-parametric tests (including Mann-Whitney U Test) were employed to determine whether there were differences in responses by gender with significance set at <math>p &lt; 0.05</math> <i>a priori</i>.</p> <p><b>Results:</b> A response rate of 87.6% (78/89) was obtained; 34.6% (27/78) respondents were male and 65.4% (51/78) were female. While all respondents appreciated the value of an evidence-based approach to optimise patient care, 75.6% (59/78) considered the placebo effect played an important role with OTC medicines. Females were more likely to feel confident recommending OTC emergency hormonal contraception than males (<math>p = 0.002</math> for levonorgestrel and <math>p = 0.011</math> for ulipristal acetate). The majority of respondents [(96.2% (75/78))] were in agreement that OTC consultations should remain a fundamental role for pharmacists and 69.2% (54/78) deemed OTC consultations have the potential to be as complex as independent prescribing. Similarly, 62.8% (49/78) thought OTC consultations were potentially as complex as vaccine administration. However, 61.5% (48/78) considered that more medicines should not be deregulated from prescription-only status.</p> <p><b>Conclusion:</b> Although data were only gathered from one institution, it is apparent that OTC consultations are still viewed as a key part of practice for these future pharmacists. Having confidence recommending a range of medicines and incorporating evidence into patient interactions needs to be reinforced, in preparation for expanding counter-prescribing and independent prescribing roles.</p>	
Reference list:	International Pharmaceutical Federation (2021). FIP Development goals digital programme 2021. Available at: <a href="https://events.fip.org/programme/fip-development-goals-digital-programme-2021/">https://events.fip.org/programme/fip-development-goals-digital-programme-2021/</a> Accessed 1 May, 2021

**Poster – Undergraduate**

Abstract title	<b>Improving the transition into Higher Education for first year pharmacy students during the COVID pandemic</b>
Author list	M Rial and N Walker
Affiliations of authors	Department of Clinical, Pharmaceutical and Biological Sciences, University of Hertfordshire
Presenting author email	c.2.walker@herts.ac.uk
Keywords	Transition, First year experience, student lifecycle
<p><b>Background:</b> Transition to higher education can be a rocky and anxious period for any student however it is perceived to be a crucial settling phase, which can affect progression and success in higher education (Morgan, 2013). Yorke (2000) notes that better preparation for higher education could be associated with a reduction in non-completion. This fragile transition process has been made potentially more difficult due to COVID-19.</p> <p><b>Description of work:</b> Within the Master of Pharmacy programme, there is a conscious effort to actively scaffold and support this transition period. There are several initiatives that have been developed to assist students in their early years in higher education. These initiatives aim to specifically support the development and improvement of independent academic skills which will influence their future academic success. Prior to enrolment on the programme, students are provided with a range of materials to support their transition which have been developed in partnership with existing students. These include a bespoke transition booklet and also the introduction of a dedicated Transition to Higher Education module which runs across the first year of the programme to support key groundings in higher education. This is also supplemented with workshops designed to support specific student groups such as those who are First generation students or those suffering from Impostor syndrome. Due to the pandemic, the majority of the teaching took place online, but real time workshops were frequently used with students encouraged to have cameras on. Group quizzes, integrated case study tasks linking science and practice and communication skills tasks in small peer groups were used to introduce gamification and encourage interaction during the pandemic. Peer support from students in the higher years of the programme was used with their attendance at some online workshops. This activity sought to inspire and reassure first year students. The initiatives aim to provide a rounded transition experience to help support students to excel in their academic careers, despite the unusual conditions presented by the pandemic.</p> <p><b>Proposed evaluation:</b> The impact of the novel Transition to Higher Education module and the other associated transition initiatives will be evaluated in terms of student satisfaction, progression, awarding gap and retention data. Qualitative data from students will also influence the initiatives going forward. It is hoped that cohort specific targeted support will encourage students to reach their potential.</p>	
Reference list:	<p>Morgan, M. (2013). <i>Improving the Student Experience: A Practical Guide for Universities and Colleges</i>. London, Routledge.</p> <p>Yorke, M. (2000). Smoothing the transition into higher education: What can be learned from student non-completion. <i>Journal of Institutional research</i>, 9(1), pp.35-47</p>



**Poster – Undergraduate**

Abstract title	<b>Using playful learning to enhance early belonging in pharmacy students.</b>
Author list	N Walker <sup>1</sup> and R O'Brien <sup>2</sup>
Affiliations of authors	<sup>1</sup> <i>Department of Clinical, Pharmaceutical and Biological Sciences, University of Hertfordshire</i> <sup>2</sup> <i>Centre for Academic Development, University of Durham</i>
Presenting author email	c.2.walker@herts.ac.uk
Keywords	Escape room, playful learning, belonging
<p><b>Background:</b> A holistic student experience is constructed of many variables including a sense of belonging. The COVID-19 pandemic has brought with it many challenges including an obstacle to developing an acute sense of belonging in higher education, especially in the first year of study (Mooney, 2021). The lack of face to face contact and persistence of the virtual environment has potentially hindered bonding in early phase students (Cheng et al, 2021). In order to tackle this issue, mechanisms were sought to support virtual engagement. Researchers have noted the impact of playful learning as an effective engagement mechanism. In particular escape room use in education has increased substantially over the past five years (Fotaris and Mastoras, 2019).</p> <p><b>Description of work:</b> An online induction week escape room was designed for first year Master of Pharmacy students. The escape room comprised a series of puzzles hosted in the online environment. Each puzzle requires participants to work together to find a password in order to progress to the next one. The escape room was hosted via Microsoft OneNote and was delivered to small groups via Zoom breakout rooms on the first day of the 2020-21 academic cycle, enabling students to engage with peers from their cohort and staff in a playful learning environment. Each breakout room (typically 15 students) was facilitated by a member of pharmacy staff. The escape room was based on generic puzzles, (not specific to pharmacy education) which were designed to get students talking and lasted about 30 minutes in total. Each room was timed to add a competitive element.</p> <p><b>Proposed evaluation:</b> Anecdotal feedback has demonstrated the overwhelmingly positive reception to the escape room. The true impact of the escape room will be explored via qualitative research, gained through focus group review of the escape room with students to direct its use in the future. Quantitative Likert scale data will allow calculation of median values for statements demonstrating the impact of this tool on early perceptions of belonging and the impact on feelings around withdrawal in the early period of the programme.</p>	
Reference list:	<p><i>Cheng, M.W., Leung, M.L., Yu, C.W., Yue, K.K., Liu, E.S. and Chu, S.K., 2021. Sustaining Healthy Staying Communities in University Residential Halls amid Unprecedented Pandemic. Sustainability, 13(11), p.6176.</i></p> <p><i>Fotaris, P. and Mastoras, T., 2019, October. Escape rooms for learning: A systematic review. In Proceedings of the European Conference on Games Based Learning (pp. 235-243).</i></p> <p><i>Mooney, C. and Becker, B.A., 2021. Investigating the impact of the COVID-19 pandemic on computing students' sense of belonging. ACM Inroads, 12(2), pp.38-45.</i></p>

## Oral presentation - COVID Impact and Innovation

Abstract title	<b>Supporting and educating pharmacists in critical care during the COVID-19 pandemic: an exploratory study</b>
Author list	Shivani Garg <sup>1</sup> , Claire Anderson <sup>1</sup> , Vincent Ng <sup>2</sup>
Affiliations of authors	<sup>1</sup> University of Nottingham, Nottingham, United Kingdom <sup>2</sup> The Royal Pharmaceutical Society, 66-68 East Smithfield, London, UK
Presenting author email	<a href="mailto:paysg5@nottingham.ac.uk">paysg5@nottingham.ac.uk</a>
Keywords	Critical Care, COVID-19, Pharmacy Education, Pandemic, Royal Pharmaceutical Society
<p><b>Background:</b> The coronavirus disease (COVID-19) highlighted the prominent role pharmacists have in supporting public health (Fauci, Lane and Redfield, 2020). In May 2020, the Royal Pharmaceutical Society (RPS) published online training resources in a bid to guide pharmacists within their deployment role (Critical Care Training RPS, 2020). This project explored the usage and views of pharmacists using the RPS COVID-19 training resources in critical care.</p> <p><b>Methods:</b> A mixed-methods approach was undertaken and delivered in two phases. Phase one constituted a survey to capture views on the usefulness and value of RPS education resources. The questionnaire was available for three weeks via Qualtrics. Analysis of survey data was conducted in Excel. In phase two, follow-up semi-structured video call interviews were conducted with survey participants to explore deeper perceptions. Interviews were transcribed verbatim and thematically analysed.</p> <p><b>Results:</b> A total of 84 survey responses were received; 80% (n=67) of respondents were pharmacists deployed to critical care. 52.2% (n=35/67) utilised RPS resources to upskill and improve their knowledge during the pandemic. 86% (n=30/35) who accessed the resources worked in critical care for more than 21 hours a week. The survey and interviews (n=4) demonstrated the value the resources had within pharmacists' training. A senior critical care pharmacist stated "there was an improvement in confidence and competence". It seemed that lack of time and awareness led to the pharmacists (n=32/67) not accessing the resources.</p> <p><b>Conclusion:</b> RPS COVID-19 education and training resources had a significant benefit on pharmacists' confidence working in a critical care environment. Engagement with resources was relatively low, which can be boosted by increasing awareness and usefulness of resources. Our understanding of COVID-19 is constantly developing, therefore it is imperative to regularly update and improve resources for pharmacists working on the frontline.</p>	
Reference list:	<p>Fauci, A., Lane, H. and Redfield, R., 2020. Covid-19 — Navigating the Uncharted. <i>New England Journal of Medicine</i>, [online] 382(13), pp.1268-1269. Available at: &lt;<a href="https://www.nejm.org/doi/full/10.1056/nejme2002387">https://www.nejm.org/doi/full/10.1056/nejme2002387</a>&gt; [Accessed 22 April 2021].</p> <p>Royal Pharmaceutical Society. 2020. <i>Critical Care Training RPS</i>. [online] Available at: &lt;<a href="https://www.rpharms.com/resources/pharmacy-guides/coronavirus-covid-19/clinical-resources-during-covid-19/upskilling-during-covid-19/critical-care-training#acknowledgements">https://www.rpharms.com/resources/pharmacy-guides/coronavirus-covid-19/clinical-resources-during-covid-19/upskilling-during-covid-19/critical-care-training#acknowledgements</a>&gt; [Accessed 10 April 2021].</p>

**Oral Presentations – COVID Impact and Innovation**

Abstract title	<b>Pharmacy students' views on the impact of COVID-19 on their health and academic experience</b>
Author list	Jenny Morrow, Maurice Hall, Lezley-Anne Hanna J. Morrow, M. Hall, L-A. Hanna
Affiliations of authors	Queen's University Belfast, United Kingdom
All author ORCID IDs	Jenny Morrow: does not have an ORCID ID Maurice Hall: <a href="https://orcid.org/0000-0002-4905-0012">https://orcid.org/0000-0002-4905-0012</a> Lezley-Anne Hanna: <a href="https://orcid.org/0000-0003-3477-7152">https://orcid.org/0000-0003-3477-7152</a>
Presenting author email	<a href="mailto:jmorrow28@qub.ac.uk">jmorrow28@qub.ac.uk</a> <a href="mailto:m.hall@qub.ac.uk">m.hall@qub.ac.uk</a>
Keywords	COVID-19, Pharmacy students, Questionnaire, Views
<p><b>Background:</b> The COVID-19 pandemic has had a significant global impact, including on Higher Education and the student experience (Office for National Statistics, 2021). From September 2020 in Queen's University Belfast School of Pharmacy, the majority of teaching and assessments were delivered online, but several additional measures were introduced to support students (including weekly online discussion sessions with staff and more one-to-one interactions with personal tutors).</p> <p><b>Aims:</b> To determine Queen's University Belfast pharmacy students' views on the extent to which the COVID-19 pandemic had affected their health and academic outcomes.</p> <p><b>Method:</b> Following ethical approval and an email invitation to participate, data about the pandemic and student experience were collected in January 2021 via an online questionnaire (from consenting first and final year students). Data analysis took the form of descriptive and inferential statistics with non-parametric tests used to determine whether there were differences in responses by gender and year group. Significance was set at <math>p &lt; 0.05</math>.</p> <p><b>Results:</b> A response rate of 44.4% (104/234) was obtained; 77.9% (81/104) respondents were female and 22.1% (23/104) were male. Many (70.2%) deemed their mental health had declined as a result of the pandemic. Only 12.5% reported the pandemic had caused them to increase their alcohol intake. Most (88.5%) were worried about academic outcomes and 47.2% considered they did not have sufficient support from academic staff teaching on the MPharm degree programme. While 58.7% felt concerned about contracting the virus on campus, female students were more likely to consider there should have been more face-to-face teaching from September to December 2020 (43.2% females versus 17.3% males, <math>p = 0.017</math>). First year students were more likely to deem Government guidance was appropriate (53.1% first year students versus 29.1% final year students, <math>p = 0.004</math>).</p> <p><b>Conclusion:</b> Although data were only gathered from one institution, this work adds to the growing evidence-base about the impact of COVID-19 on students. Despite additional interventions, student expectations about their university experience still exceeded what was provided during the pandemic.</p>	
Reference list:	Office for National Statistics (2021). Coronavirus and the impact on students in higher education in England: September to December 2020. Available at: <a href="https://www.ons.gov.uk/peoplepopulationandcommunity/educationandchildcare/articles/coronavirusandtheimpactonstudentsinhighereducationinenglandseptembertodecember2020/2020-12-21">https://www.ons.gov.uk/peoplepopulationandcommunity/educationandchildcare/articles/coronavirusandtheimpactonstudentsinhighereducationinenglandseptembertodecember2020/2020-12-21</a> Accessed 1 May, 2021

**Oral Presentations – COVID Impact and Innovation**

Abstract title	<b>Independent prescribers' preparedness for practice during COVID-19</b>
Author list	Ellen Schafheutle <sup>1</sup> , Dianne Bell <sup>1</sup> , Akhil Gupta <sup>2</sup> , Ali Hindi <sup>1</sup> , Keith Holden <sup>2</sup> , Leonie McCormack <sup>1</sup>
Affiliations of authors	<sup>1</sup> University of Manchester, Division of Pharmacy and Optometry, United Kingdom <sup>2</sup> University Of Sunderland, School of Pharmacy and Pharmaceutical Sciences, United Kingdom
All author ORCID IDs	Ellen Schafheutle: <a href="https://orcid.org/0000-0001-7072-0888">0000-0001-7072-0888</a> Ali Hindi: 0000-0002-1076-435X
Presenting author email	<a href="mailto:ellen.schafheutle@manchester.ac.uk">ellen.schafheutle@manchester.ac.uk</a>
Keywords	Independent prescribing, pharmacist practice, Covid-19
<p><b>Background:</b> Despite exploration of barriers and facilitators to independent prescriber (IP) practice, little is known about how prepared IPs felt during the COVID-19 pandemic (Hindi <i>et al.</i>, 2019).</p> <p><b>Objective/Aim:</b> To investigate if and how the COVID-19 pandemic changed IPs' practice, and whether their IP qualification had been valuable in preparing them for practice during the pandemic.</p> <p><b>Design/Method/Methodology:</b> A questionnaire was developed and piloted to include demographic questions and Likert-style agreement statements. With ethics committee approval, the questionnaire was distributed electronically (Qualtrics) to 162 IP alumni (2016-2020) from two universities in North England. Data were analysed using SPSS.</p> <p><b>Results:</b> Thirty IPs responded (18.5%), two nurses and 28 pharmacists. Twenty-five respondents were female (83%); ages ranged from 28-50 years (mean 35). Similar numbers of respondents said their role had stayed the same as a consequence of the COVID-19 pandemic (12/26) or become more patient-facing (face-to-face, phone, video: 13/26). When asked about ways in which respondents' roles had changed due to COVID-19, 11/21 said remote consultations had become the default method for their patient interactions. Nineteen respondents (68%) described themselves as active prescribers and answered statements about how prepared they felt for advanced clinical roles since the beginning of the COVID-19 pandemic. More than half felt 'somewhat' to 'extremely' prepared for 'prescribing in the absence of direct clinical supervision' (n=11), 'triage/prioritisation of clinical cases' (n=10), 'recognising the deteriorating patient' (n=10), 'conducting remote consultations' (n=10), and 'remote prescribing' (n=9). Most felt 'not/a little' prepared for 'prescribing in clinical care' (n=14), 'dealing with bereavement' (n=16), 'coping with the dying patient' (n=17), 'caring for distressed relatives' (n=18).</p> <p><b>Discussion:</b> Independent prescribers participating in this study felt their qualification prepared them for various practice changes due to COVID-19. However, some further skills may need to be included to support IPs to better deal with serious illness and death during a pandemic.</p>	
Reference list:	Hindi, A.M., Seston, E.M., Bell, D., Steinke, D., Willis, S. and Schafheutle, E.I., 2019. Independent prescribing in primary care: a survey of patients', prescribers' and colleagues' perceptions and experiences. <i>Health &amp; social care in the community</i> , 27(4), pp.e459-e470.

**Posters – COVID Impact and Innovation**

Abstract title	<b>Providing virtual APPE rotations for international pharmacy students during the pandemic</b>
Author list	L. Allsup, M. Shaw, C. Smith, L. Grimes
Affiliations of authors	Centre for Pharmacy Postgraduate Education
Presenting author email	<a href="mailto:liz@cppe.ac.uk">liz@cppe.ac.uk</a>
Keywords	Virtual, remote, online, international students
<p><b>Background:</b> Our organisation has provided advanced pharmacy practice experiences (APPE) for final year pharmacy students from the USA for several years. APPE integrate students into the workplace environment and enable them to gain professional experience and competence under the supervision of a preceptor (Moorman-Li et al., 2020). International, non-patient care electives facilitate networking between pharmacy professionals from regions of the world with different healthcare systems. Students usually travel to the UK and work alongside our learning development pharmacy professionals. They also spend time in hospital and community pharmacy settings.</p> <p><b>Description of work:</b> In 2020, in common with many experiential rotations (Moorman-Li et al., 2020; Moreau et al., 2021), cancellation of the face-to-face APPE rotation due to the COVID-19 pandemic led to rapid development of a virtual alternative. Learning outcomes were adapted to reflect the virtual nature of the experience but remained broadly similar to the face-to-face rotation. These outcomes focused on gaining an understanding of pharmacy practice in England and the role of postgraduate education in supporting workforce development. Activities included online meetings with pharmacy professionals from different sectors of practice, contribution to postgraduate pharmacy learning materials, participation in online postgraduate learning events and development of videos supporting marketing messages for pharmacy learners. Regular online meetings between preceptors and students were key to ensuring they had a clear plan of activities, were progressing with projects and meeting learning outcomes.</p> <p><b>Proposed evaluation:</b> We developed an evaluation form to capture student reflections in narrative format. The aim was to assess the students’ opinion on whether the experience meets their learning outcomes and needs, usefulness of activities and suggestions for improvement. Future rotations are likely to continue in a virtual form for the rest of 2021 and we plan to adapt the student feedback form to include more Likert-type questions before further evaluation.</p>	
Reference list:	<p>Moorman-Li, R., Egelund, E. F., Reid, J., Motycka, C. A., Kunz Coyne, A., Jakab, E., Stultz, K., Buring, S., &amp; Miller, S. (2020). A Virtual Community Pharmacy Advanced Pharmacy Practice Experience (APPE) in Response to COVID-19. <i>Journal of Curriculum and Teaching</i>, 9(4), 89-94.</p> <p>Moreau, C., Maravent, S., Hale, G. M., &amp; Joseph, T. (2021). Strategies for Managing Pharmacy Experiential Education During COVID-19. <i>Journal of Pharmacy Practice</i>, 34(1), 7-10.</p>

**Posters – COVID Impact and Innovation**

Abstract title	<b>Using Technology Enhanced Learning methods to enable remote peer assessment in practice</b>
Author list	David Gibson <sup>1</sup> , Frances Clymer <sup>1</sup>
Affiliations of authors	<sup>1</sup> <i>School of Pharmacy and Medicines Optimisation, Health Education England, Leeds, UK</i>
Presenting author email	<a href="mailto:David.gibson@hee.nhs.uk">David.gibson@hee.nhs.uk</a>
Keywords	Peer assessment, foundation pharmacy, technology enhanced learning
<p><b>Background:</b> Health Education England (HEE) developed the Interim Foundation Pharmacist Programme (IFPP) in response to the challenges faced by provisionally registered pharmacists, across all sectors of pharmacy practice, during the COVID-19 pandemic. Critical to IFPP delivery was developing innovative assessment methodologies to overcome the challenges faced by pharmacy (HEE 2019) including; isolated practitioners (Magola and Willis 2018) with reduced access to feedback from educators, variable reliability of formative assessment standards, lack of ability to interact with peers and learn across multiple clinical environments. Peer led asynchronous formative assessment of clinical interventions with educational supervisor oversight was identified as a methodology that tackled these challenges.</p> <p><b>Description of work:</b> A system enabling anonymous web-based input and peer review of pharmacy work-based assessments (WBA) was developed in the IFPP ePortfolio. Learners input a case using an electronic form in the ePortfolio. Cases are randomised and allocated to three peers who provide scores and feedback. Educational supervisors review feedback for appropriateness. Finally learners reflect upon feedback received. Randomisation ensures learners from different sectors and regions are matched ensuring a breadth of perspectives. Multiple perspectives on a single case enriches learning and reduces bias due to individuals receiving a greater breadth of feedback. Go-live date for the first round of peer assessment is June 2021, with over 1250 learners enrolled on the IFPP.</p> <p><b>Proposed Evaluation:</b> Peer review scores for each element and overall score for the WBA will be analysed to determine any variability in scoring between regions and sectors of practice. Kruskal-Wallis-H test will be used to determine any statistically significant differences between groups. Surveys will be conducted, determining any educational benefit of the intervention and how to develop it further. Results will inform how innovative peer assessment and digital solutions can enhance future formative assessment strategy for foundation level pharmacists across the HEE delivered foundation training year.</p>	
Reference list:	<p>Health Education England (2019) Advancing pharmacy education and training: a review. <a href="https://www.hee.nhs.uk/our-work/advancing-pharmacy-education-and-training">Review of education and training   Health Education England (hee.nhs.uk)</a>. Access 21 May, 2021</p> <p>Magola, E. Willis, S. and Schafheutle, E. (2018) Community pharmacists at transition to independent practice: isolated, unsupported and stressed. <i>Health and Social Care in the Community</i>. <b>26</b>, pp849-859.</p>

**Posters – COVID Impact and Innovation**

Abstract title	<b>High stakes online OSCEs in a pandemic</b>
Author list	Natalie Lewis, Mark Brennan, Gagan Degun, Emma Price, Sima Hassan.
Affiliations of authors	Aston University, Birmingham, United Kingdom
Presenting author email	Lewisn1@aston.ac.uk
Keywords	OSCE, Assessment, online, pandemic

**Background:** Objective Structured Clinical Examinations (OSCEs) are utilised at Aston University to ensure students possess the core competencies to enter into foundation pharmacy training. Traditionally live face-to-face assessments, an alternative online format was required due to the impact of COVID-19.

**Objective/Aim:** The aim was to run an eight station OSCE online for final year MPharm and OSPAP students.

**Design/Method/Methodology:** A team led the design stages blueprinting, approving and standard setting of eight (10 minute) OSCE stations; three oral synchronous interactive using Blackboard Collaborate, and one asynchronous interactive and four asynchronous independent tasks delivered via the virtual learning environment. Learning from a previous study (Kakadia et al. 2020) staff were given preparation in a practice environment, multiple streams were used to reduce student traffic in the live assessment, clear lines of staff communication were signposted and additional staff were on standby. Students were orientated with practice stations employing the same format and given required resources in advance. Multiple matched versions of stations were written to ensure assessment integrity.

**Results:** MPharm students had three opportunities in the cycle to complete the assessment; the results can be seen in Table 1 below:

Week	Number of Students engaging	Number of staff employed	Number of parallel streams	Number of technical issues reported	Number of students passing
24	152	60	7	6	127 (83.6%)
26	31	26	3	3	27 (87%)
28	4	11	1	0	3 (75%)

Table 1. Outcomes of the OSCE assessments

Only two students had technical issues that resulted in their attempt being deferred to week 26. Other technical issues did not affect the assessment outcome for the students. Overall, 158 MPharm and 19 overseas pharmacists' assessment programme (OSPAP) students completed the OSCEs by week 28 with pass rates of 99.4% and 100% respectively. No complaints were received and all sittings ran to time. Initial positive comments from staff and students highlighted; clarity of instruction, preparation provided and general organisation.

**Discussion:** Extensive planning and preparation with staff and students ensured smooth delivery of OSCEs with minimal technical issues. This format will be considered as part of a blended approach moving forwards.

Reference list:	Kakadia, R, Chen, E, Ohyama, H. Implementing an online OSCE during the COVID-19 pandemic. <i>J Dent Educ.</i> 2020; 1– 3. <a href="https://doi.org/10.1002/jdd.12323">https://doi.org/10.1002/jdd.12323</a>
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**Posters – COVID Impact and Innovation**

Abstract title	<b>Pharmacy Education through Public and Patient Engagement during COVID-19 pandemic: the switch from physical to digital delivery.</b>
Author list	Steven Seymour; Ann Urmston, Comensus Patient Member, Andrew Lunn, Andrea Manfrin.
Affiliations of authors	University of Central Lancashire, Preston, United Kingdom
All author ORCID IDs	Steven Seymour - 0000-0003-0222-6110 Ann Urmston - 0000-0001-9513-1633 Andrew Lunn - 0000-0003-2884-2755 Andrea Manfrin - 0000-0003-3457-9981
Presenting author email	<a href="mailto:SSeymour3@uclan.ac.uk">SSeymour3@uclan.ac.uk</a> / <a href="mailto:AUrmston@uclan.ac.uk">AUrmston@uclan.ac.uk</a>
Keywords	Public and Patient Engagement, PPE, Patients as Teachers, Pharmacy Education,
<p><b>Background:</b> Since 2013, the School of Pharmacy and Biomedical Sciences at the University of Central Lancashire (UCLan) has collaborated with the Community Engagement and Service User Support (Comensus) department (Becket et al., 2014). To date, we have a fully integrated Patient, and Public Engagement (PPE) programme referred to as Patients As Teachers (PAT). This is included in our MPharm spiral curriculum designed and delivered in partnership and collaboration with PPE and Comensus.</p> <p><b>Description of work:</b> The PAT sessions are designed around the curriculum, including body systems, medications management, medical devices and clinical skills increasing in complexity. They are designed to enhance student's skill base in line with the General Pharmaceutical Council (GPhC) rules and regulations (Lunn et al. , 2020). Students consolidate their knowledge by relating theory to real-life patient perspectives; thus, moving from 'nesting' into the 'correlation' step of integration, allowing them to become patient-centred pharmacists. During 2020/21, the delivery model used had to change from face-to-face to online. The aim was to provide the same students' experience using a digital world instead of face to face.</p> <p><b>Proposed Evaluation:</b> Description of delivery through Covid - 19</p> <p>Here we present our conceptual model, which has five elements:</p> <ol style="list-style-type: none"> <li>1) Video consultation instead of in-person consultation;</li> <li>2) An online platform for delivering the sessions;</li> <li>3) The adaptation of the face to face teaching material to online video presentations;</li> <li>4) A shared virtual environment between the patients and the students for discussing issues related to conditions and medicines usage;</li> <li>5) Creation of a virtual room for discussing the case.</li> </ol> <p>The experience that our students gathered during the video consultations is becoming an essential skillset required during the COVID-19 pandemic. Pharmacists' video consultations will become a vital service provision for the elderly, people with disabilities, those living in remote locations, and younger patients, who are more inclined to use digital devices. We are now considering to provide training using blended consultations mixing face to face with online to accommodate as many patients as possible, and reflect the changing face of patient consultation.</p>	



Approaches to our evaluation:

- Internal – focus groups with public members, staff and students to evaluate the year activities.
- Formal – we aim to follow previous method of evaluation, inviting students to complete a questionnaire evaluating their patient as teacher sessions. The data has previously been analysed using descriptive statistics and thematic analysis from free text comments (Lunn et al., 2020).
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Reference list:

Becket, G., Wilson, S., Greenwood, K., Urmston, A., Malihi-Shoja, L. (2014). Involving patients and the public in the delivery of pharmacy education. *The Pharmaceutical Journal*  
DOI:10.1211/PJ.2014.11138731

Lunn, A., Urmston, A., Seymour, S. Manfrin, A., (2020). Patient as teacher sessions contextualise learning, enhancing knowledge, communication, and participation of pharmacy students in the United Kingdom. *Journal of Educational Evaluation for Health Professions*. DOI: [10.3352/jeehp.2020.17.15](https://doi.org/10.3352/jeehp.2020.17.15)

**Posters – COVID Impact and Innovation**

Abstract title	<b>An evaluation of online clinical pharmacy placements for Master of Pharmacy undergraduates</b>
Author list	Jennifer Silverthorne <sup>1</sup> , Holly Devine <sup>2</sup> , Kate Oates <sup>3</sup> , Diane Mitchell <sup>3</sup> , Caroline Barrett <sup>3</sup> , Alison Fryer <sup>2</sup> , Daniel Jones <sup>3</sup>
Affiliations of authors	<sup>1</sup> The University of Manchester, United Kingdom <sup>2</sup> Salford Royal NHS Foundation Trust, United Kingdom <sup>3</sup> Manchester University NHS Foundation Trust, United Kingdom
All author ORCID IDs	Jennifer Silverthorne 0000-0002-3686-0200
Presenting author email	<a href="mailto:Jennifer.silverthorne@manchester.ac.uk">Jennifer.silverthorne@manchester.ac.uk</a>
Keywords	<b>Pharmacy education, experiential learning, web-based learning</b>
	<p><b>Background:</b> During the global Coronavirus pandemic, some placements for healthcare undergraduates were halted and replaced with online experiences (Daftary <i>et al</i>, 2020; Roskvist <i>et al</i>, 2020; Salter <i>et al</i>, 2020). At one university, hospital pharmacy tutors developed a series of online events to address placement intended learning outcomes (ILOs). Topics covered during 13 small-group placements for years 2-4 included therapeutics e.g. respiratory and diabetes, and clinical skills e.g. clinical checking.</p> <p><b>Aims:</b> To evaluate students' perceptions of online clinical pharmacy placements. Objectives included exploring perceptions of the benefits and disadvantages and factors influencing student experiences.</p> <p><b>Method:</b> An online survey was developed using closed, Likert scale and open question types. Topics explored were relevant to the delivery of all placements and included learning experiences, tutor support and technological issues. A participant information sheet was emailed to undergraduates in years 2-4 before the survey was released via the university's virtual learning environment. Students had six weeks to respond, with an email reminder sent after four weeks. The survey was anonymous and evaluated a teaching intervention; as such ethical approval was not required.</p> <p><b>Results:</b> Sixty-six students completed the survey (overall response rate 14.6%); 16 students were from year 2, 20 from year 3, 30 from year 4 and the majority of respondents were female (76%, n=50). Statistical analysis (Mann-Whitney U test) revealed no significant differences between student responses according to year group or gender. The majority of students agreed that online placements met their ILOs (78%, n=49) and were satisfied with placement tutor support (95%, n=60). However, around a third (35%, n= 22) thought that online placements did not adequately replicate in-person placements. Most students (79%, n=52) experienced technological problems sometimes or often, with 36% (24) reporting a resultant adverse effect on their learning experience.</p> <p><b>Conclusion:</b> Limitations include the low overall response rate, which limits the generalisability of the findings. This study confirms that online placements permitted successful delivery of ILOs related to therapeutics and clinical skills. However, they were not wholly effective in replicating in-person placements; it was not possible to simulate the clinical environment nor interactions with patients and the multidisciplinary team. Students frequently encountered technological problems which were a barrier to learning; universities must consider this when planning blended learning delivery.</p>
Reference list:	<p>Daftary, M.N., Jorden, J., Habib, M., Pather, I., &amp; Tofade, T. (2020). Implementing virtual experiences and remote assessments during the COVID-19 pandemic: A college experience. <i>Pharmacy Education</i>, 20(2), 54 – 55.</p> <p>Roskvist, R., Eggleton, K., &amp; Goodyear-Smith, F. (2020). Provision of e-learning programmes to replace undergraduate medical students' clinical general practice attachments during COVID-19 stand-down. <i>Education for Primary Care</i>, 31 (4), 247-254.</p> <p>Salter, C., Oates, R.K., Swanson, C., &amp; Bourke, L. (2020). Working Remotely: Innovative Allied Health Placements in Response to COVID-19. <i>International Journal of Work-Integrated Learning</i>, 21(5), 587-600.</p>

## Posters – COVID Impact and Innovation

Abstract title	<b>Pharmacy undergraduates' concerns around attending hospital placements during the Coronavirus pandemic</b>
Author list	Jennifer Silverthorne <sup>1</sup> , Holly Devine <sup>2</sup> , Kate Oates <sup>3</sup> , Diane Mitchell <sup>3</sup> , Caroline Barrett <sup>3</sup> , Alison Fryer <sup>2</sup> , Daniel Jones <sup>3</sup>
Affiliations of authors	<sup>1</sup> The University of Manchester, United Kingdom <sup>2</sup> Salford Royal NHS Foundation Trust, United Kingdom <sup>3</sup> Manchester University NHS Foundation Trust, United Kingdom
All author ORCID IDs	Jennifer Silverthorne 0000-0002-3686-0200
Presenting author email	<a href="mailto:Jennifer.silverthorne@manchester.ac.uk">Jennifer.silverthorne@manchester.ac.uk</a>
Keywords	Pharmacy education, experiential learning
<p><b>Background:</b> During the Coronavirus pandemic, pharmacy undergraduate hospital placements at one university were rationalised due to capacity problems and local levels of infection. Placements focussing on consultation skills were eventually delivered for years 2-4. Research in nursing (Swift <i>et al</i>, 2020) suggests that students may have a variety of anxieties about attending placement during the pandemic.</p> <p><b>Aims:</b> To evaluate students' opinions on attending hospital placements during the Coronavirus pandemic. Objectives included exploring concerns and factors influencing student opinions.</p> <p><b>Method:</b> An online survey was prepared before placements were delivered, using closed, Likert scale and open questions. Topics explored included travel arrangements, infection control and induction requirements as well as possible influencing factors such as COVID-19 mortality risk (e.g. ethnicity, long-term conditions) and home circumstances (e.g. living with vulnerable relatives). A participant information sheet was emailed before the survey was released via the university's virtual learning environment. All students had six weeks to complete the survey, with an email reminder sent after four weeks. The survey was anonymous and explored a teaching intervention; as such, ethical approval was not required by the university. Data were analysed using simple descriptive statistics, and chi squared tests used to determine relationships between variables.</p> <p><b>Results:</b> Eighty-two students completed the survey (response rate 13.2%). Of these, 71% (58) were of non-white ethnicity and all had low COVID-19 risk scores. Although none had caring responsibilities, 32% (26) lived with family. More than half (55%, n=45) were worried about being exposed to Coronavirus on placement, with 38% (31) concerned about the health of those they lived with. Furthermore, 29% (24) students were concerned about using public transport although the majority (74%, n=61) were confident wearing personal protective equipment (PPE). There was no statistical association between placement concerns and student ethnicity or living with family.</p> <p><b>Conclusion:</b> Limitations of this study include the low response rate, which limits generalisability. Findings confirm many students had concerns about their health and those they lived with. Placement tutors provided reassurance via induction elearning, access to PPE, vaccination and lateral flow testing. Placement providers should be mindful of student concerns, taking travelling and home circumstances into account when planning future placements.</p>	
Reference list:	Swift, A., Banks, L., Baleswaran, A., Cooke, N., Little, C., <i>et al</i> . COVID-19 and student nurses: A view from England. <i>Journal of Clinical Nursing</i> , 29, 3111–3114.

**Posters – COVID Impact and Innovation**

Abstract title	<b>Development of a 12-month learning programme to support Provisionally registered pharmacists (PRPs) working in community pharmacy practice</b>
Author list	Clare Smith <sup>1</sup> , Matthew Shaw <sup>1</sup> , Helen Middleton <sup>1</sup>
Affiliations of authors	<sup>1</sup> Centre of Pharmacy Postgraduate Education, University of Manchester
All author ORCID IDs	Matthew Shaw: 0000-0001-6735-7977
Presenting author email	<a href="mailto:clare.smith@cppe.ac.uk">clare.smith@cppe.ac.uk</a>
Keywords	Provisionally registered pharmacists, Foundation, Education
<p><b>Background:</b> Health Education England (HEE) developed the Interim Foundation Pharmacist Programme (IFPP) to support the 2019/20 cohort of provisionally registered pharmacists (PRPs) whose training and registration was disrupted by the COVID-19 pandemic. CPPE were commissioned by HEE to provide the education programme for PRPs working in independent and small/medium multiple community pharmacies.</p> <p>CPPE developed the 12-month Foundation Pharmacist Programme (FPP) 2020/21, mapped to the IFPP learning outcomes (Health Education England, 2021) which were developed in conjunction with Royal Pharmaceutical Society (RPS) and based on the RPS Interim Foundation Curriculum (Royal Pharmaceutical Society. 2020).</p> <p><b>Description of work:</b> To develop and evaluate the 12-month FPP which aims to support PRPs to transition from pre-registration, through provisional registration to fully registered pharmacists.</p> <p>The programme is predominantly vocational, and learners use their work-based experiences to identify areas of good practice and reflect on development opportunities. The programme takes a blended learning approach which includes:</p> <ul style="list-style-type: none"> <li>• Education supervision and feedback</li> <li>• Four modules of online learning</li> <li>• Online workshops</li> <li>• Online assessment</li> <li>• Supervised learning events</li> <li>• Peer assessment</li> <li>• Portfolio development</li> </ul> <p><b>Proposed evaluation:</b> 215 PRPs enrolled onto the programme and evaluation is currently ongoing. The IFPP learning outcomes focus on confidence, proficiency, workplace outcomes and decision-making. The evaluation aims to assess the impact of the programme on the learners and their opinions on how the programme supported them to achieve competence against the learning outcomes and high-quality patient outcomes.</p> <p>Data will be gathered from PRP's after each module, and at the end of the programme (September 2021) using an online survey. The survey includes Likert-type and free text questions and will gather learner opinion on the following themes:</p> <ul style="list-style-type: none"> <li>• Structure and length of modules</li> <li>• Usefulness and variety of activities</li> <li>• Development of confidence</li> <li>• Application of learning to role</li> <li>• Progression against IFPP outcomes</li> <li>• Education supervisor support</li> </ul> <p>The data will also be used to support the programmes fitness for purpose and further development.</p>	

Abstract number: 26

Reference list:	<p>Health Education England. Interim Foundation Pharmacist Programme learning outcomes. Available at: <a href="https://www.hee.nhs.uk/sites/default/files/documents/IFPP%20Learning%20Opportunities%20-%20Mapped%20to%20IFPP%20Learning%20Outcomes%20-%20February%202021.pdf">https://www.hee.nhs.uk/sites/default/files/documents/IFPP%20Learning%20Opportunities%20-%20Mapped%20to%20IFPP%20Learning%20Outcomes%20-%20February%202021.pdf</a> Accessed 21 May, 2021</p> <p>Royal Pharmaceutical Society. 2020. The RPS Interim Foundation Pharmacist Curriculum 2020. Available at: <a href="https://www.rpharms.com/Portals/0/Foundation%20Curriculum/00285%202008%20-%20Provisional%20Curriculum%20-%200003.pdf?ver=2020-08-21-151053-940">https://www.rpharms.com/Portals/0/Foundation%20Curriculum/00285%202008%20-%20Provisional%20Curriculum%20-%200003.pdf?ver=2020-08-21-151053-940</a> Accessed 21 May 2021</p>
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**Posters – COVID Impact and Innovation**

Abstract title	Adapted experiential learning for pharmacy undergraduates – developed as a result of the COVID-19 pandemic
Author list	N. Soni <sup>1</sup> , O. Tsaponia <sup>1</sup> , S. Heasman <sup>1</sup> and J. Portlock <sup>1</sup>
Affiliations of authors	<sup>1</sup> University of Sussex, Brighton, United Kingdom
Presenting author email	<a href="mailto:ns493@sussex.ac.uk">ns493@sussex.ac.uk</a> and <a href="mailto:S.A.Heasman@sussex.ac.uk">S.A.Heasman@sussex.ac.uk</a>
Keywords	Simulation learning, Virtual Placement, Pharmacy education COVID-19, medicines reconciliation
<p><b>Background:</b> The provision of experiential learning for pharmacy undergraduates is stipulated by the General Pharmaceutical Council (GPhC, 2011, p. 43); the pandemic resulted in the need to transform in-person placements to virtual alternatives.</p> <p><b>Aim:</b> Adapting in-person experiential placements into virtual alternatives.</p> <p><b>Objective:</b> Constructing a meaningful virtual experiential placement experience.</p> <p><b>Design/Method/Methodology:</b> Our Zoom virtual placement week for 3<sup>rd</sup> and 4<sup>th</sup> year students (21 and 25 students) was split into community and hospital pharmacy workshops. Content was created to ensure that the learning outcomes from in-person placements were met. We will focus on two of these: completing medicines reconciliations and creating case-based-discussions (CBDs). This was achieved through a mixture of student-engagement tools and immersive Virtual Reality (VR) technology. These technologies were utilised to create virtual patients and a ward simulation (WS). Questionnaires were administered to collect the students’ feedback on their experiences of the specific activities.</p> <p><b>Results:</b> The 3<sup>rd</sup> years found the WS and “live” patient-facing workshops to be the most enjoyable activities. 4<sup>th</sup> years found CBDs, WS, and complex patient cases to be the most enjoyable. Enjoyability was determined by students ranking activities as the most to the least enjoyable. Improvement ideas included: improved accessibility of the simulated environment, smaller groups for the WS exercise, better organisation of online material, and fewer sessions in one day. 100% of 3<sup>rd</sup> years learned something new from the WS, compared with 50% of the 4<sup>th</sup> years.</p> <p><b>Discussion:</b> The sessions that students found most enjoyable relate to the learning outcomes of completing medicines reconciliations and CBDs. However, there appears to be more utility for the 3<sup>rd</sup> years with respect to the ward simulation and learning new skills. Overall, the students have enjoyed the virtual alternative, and the in-person learning outcomes were met.</p>	
Reference list:	General Pharmaceutical Council. (2011). Future pharmacists Standards for the initial education and training of pharmacists. Available at: <a href="https://www.pharmacyregulation.org/sites/default/files/document/gphc_future_pharmacists_may_2011.pdf">https://www.pharmacyregulation.org/sites/default/files/document/gphc_future_pharmacists_may_2011.pdf</a>

**Posters – COVID Impact and Innovation**

Abstract title	<b>Staff views of the adapted experiential learning experience for MPharm students during the COVID-19 pandemic.</b>
Author list	N. Soni <sup>1</sup> , O.Tsaponia <sup>1</sup> , S. Heasman <sup>1</sup> and J. Portlock <sup>1</sup>
Affiliations of authors	<sup>1</sup> University of Sussex, Brighton, United Kingdom
Presenting author email	N. Soni <a href="mailto:ns493@sussex.ac.uk">ns493@sussex.ac.uk</a> and S. Heasman <a href="mailto:S.A.Heasman@sussex.ac.uk">S.A.Heasman@sussex.ac.uk</a>
Keywords	Simulation learning, Immersive Virtual Reality Technology, Virtual Placement, Pharmacy Education, COVID-19
<p><b>Background:</b> Due to restrictions imposed by the pandemic, in-person experiential placements as recommended by the General Pharmaceutical Council (GPhC, 2011, p. 43) were not viable. As a result, the in-person experience was transformed into a virtual alternative.</p> <p><b>Aim:</b> Establishing the academics' experience of the virtual alternative.</p> <p><b>Objective:</b> Gather their experience using a questionnaire.</p> <p><b>Methodology:</b> Our Zoom virtual placement week was split into community and hospital workshops delivered to our 3<sup>rd</sup> and 4<sup>th</sup> year MPharm students (21 and 25 students). Workshop content was constructed to ensure the in-person placement learning outcomes were met. Student engagement tools such as immersive virtual reality technology was utilised. The delivering academics' experience was assessed via a questionnaire afterwards (18 participants were invited to complete, of whom 14 completed). This was based on similar questionnaires capturing staff opinions on educational initiatives and empirical questions.</p> <p><b>Results:</b> Academics were asked which skills they felt the students had gained during the virtual placement. They reported that the students were able to apply their clinical skills taught during the workshops to scenarios such as drug history taking, medicines reconciliation and also develop their oral presentation skills by means of a case-based discussion. When asked what impact the virtual placement had on the students' pharmacy practice skills, 9 out of 14 respondents reported that it had provided the students with the opportunity to develop their confidence of utilising these clinical skills.</p> <p><b>Conclusion:</b> The overall conclusion from the findings was that the virtual placement experience was an excellent learning tool for the students and gave them some of the practical skills they needed before becoming a pharmacist. Going forward, there is a need to ensure that experiences are provided which reflect more pharmacy sectors.</p>	
Reference list:	General Pharmaceutical Council. (2011). Future pharmacists Standards for the initial education and training of pharmacists. Available at: <a href="https://www.pharmacyregulation.org/sites/default/files/document/gphc_future_pharmacists_may_2011.pdf">https://www.pharmacyregulation.org/sites/default/files/document/gphc_future_pharmacists_may_2011.pdf</a>

**Posters – COVID Impact and Innovation**

Abstract title	<b>Redesigning pre-registration training in a COVID world</b>																			
Author list	Jennifer Thomson, Hayley Wickens																			
Affiliations of authors	Health Education England (HEE) School of Pharmacy South, Winchester																			
Presenting author email	<a href="mailto:Jennifer.Thomson@hee.nhs.uk">Jennifer.Thomson@hee.nhs.uk</a>																			
Keywords	Quality Improvement, Online, Pre-registration																			
<p><b>Background:</b> HEE South runs pre-registration pharmacist (PRP) training across Thames Valley, Wessex and the South West; our regional events moved online in 2020 due to the pandemic. Feedback from the 2020/21 cohort induction event in August 2020 suggested that trainees felt sessions were not interactive enough, despite local host Trusts booking rooms where small groups could interact in a socially distanced manner.</p> <p><b>Objective/Aim:</b> To redesign the delivery of regional courses to enhance remote learner experience.</p> <p><b>Design/Method/Methodology:</b> A quality improvement “Plan Do Study Act” model was applied when planning the February 2021 event, with increased group activities and breakout groups planned to replicate the in-person experience; sessions started with ice-breakers (e.g. virtual scavenger hunt) to allow interaction. Key stakeholders (lead education and training pharmacist and chief pharmacists) at PRP trusts were engaged to ensure IT support was available. A further feedback survey was sent to participants.</p> <p><b>Results:</b></p> <table border="1"> <thead> <tr> <th></th> <th>August 2020</th> <th>Feb 2021</th> </tr> </thead> <tbody> <tr> <td>Survey question</td> <td colspan="2">% strongly agree or agree</td> </tr> <tr> <td>It was easy to log in</td> <td>100%</td> <td>95%</td> </tr> <tr> <td>Online delivery worked well</td> <td>81%</td> <td>94%</td> </tr> <tr> <td>I logged in on my own device</td> <td>43%</td> <td>100%</td> </tr> <tr> <td>Response rate</td> <td>73%</td> <td>63%</td> </tr> </tbody> </table> <p><b>Discussion:</b> Use of own devices, ice-breakers and small group work designed into the second event led to increased involvement, and increased participant satisfaction. Regional training may retain many of these online features even as pandemic restrictions lift; these events may be as rewarding as face-to-face teaching with less travel for trainees and facilitators. The increase in trainees logging in on their own devices rather than in trust based groups could be the reason for the small increase in difficulties in logging on.</p>				August 2020	Feb 2021	Survey question	% strongly agree or agree		It was easy to log in	100%	95%	Online delivery worked well	81%	94%	I logged in on my own device	43%	100%	Response rate	73%	63%
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It was easy to log in	100%	95%																		
Online delivery worked well	81%	94%																		
I logged in on my own device	43%	100%																		
Response rate	73%	63%																		



## Posters – COVID Impact and Innovation

Abstract title	<b>Development and evaluation of online formative Objective Structured Clinical Examinations (OSCE) for pre-registration trainee pharmacists in the UK</b>
Author list	H. Wickens, J. Thomson, H. Ireland, C. Murphy, K. Purbrick Thomson, X. Bray, R. James and M. Miell
Affiliations of authors	1. School of Pharmacy, Health Education England (HEE) South, Oxford, UK 2. Pharmacy Workforce Development South (PWDS), University Hospitals Bristol NHS Foundation Trust, Bristol, UK
All author ORCID IDs	0000-0002-3232-3168 0000-0002-6870-873X
Presenting author email	<a href="mailto:hayley.wickens@hee.nhs.uk">hayley.wickens@hee.nhs.uk</a>
Keywords	OSCE, Formative, Online, Pre-registration, assessment
<p><b>Background:</b> In person formative OSCEs are a feature of pharmacist training and used to demonstrate competency and direct further learning (Haughey and Hare (2017)). The coronavirus pandemic has demanded training adapts, including to online delivery, thus ensuring educational opportunities remain and are safe.</p> <p><b>Aims:</b> Develop and evaluate online formative OSCEs for 130 pre-registration trainee pharmacists undertaking the HEE South (UK) programme</p> <p><b>Method:</b> We developed online OSCEs, basing the structure of the event on a traditional in-person method, and transferring this to the online MS Teams environment. We replaced paper-based resources and mark sheets with online resources accessed by trainees and assessment grids held on HEE Sharepoint servers for assessors. We ran online training pre-event for all participants and made training videos available. After a successful pilot event, online OSCEs were run over three days in January 2021 live on MS Teams. The OSCEs comprised 5 clinical scenario stations; medication error, potassium supply, antibiotic stewardship, dyspepsia and threadworm consultation. Trainees rotated through all five 10-minute stations. Three circuits ran concurrently. Trainees had an individualised timetable and help room access for wellbeing and IT concerns. Trainees and assessors were asked to fill in online feedback questionnaires at the end of the event.</p> <p><b>Results:</b> Pass rates for each station ranged from 24% to 86%. Excellent communication and competency were identified by assessors, as well detecting clinical and consultation skills requiring improvement. Trainee, actor and assessor feedback on the online process was positive “All went very smoothly... easier than in person!” (Tutor); “A good experience” (Trainee). Many cited the lack of travel as beneficial “Saved time for everyone and more environmentally friendly” (Trainee); “Travelling somewhere unfamiliar... would add stress and cost” (Trainee). Over 60% of trainees said they would accept OSCEs online again.</p> <p><b>Conclusion:</b> Online OSCEs were a successful formative assessment. Feedback suggests value in continuing with the online delivery post-pandemic.</p>	
Reference list:	Haughey, S., & O'Hare, R. (2017). <i>Pharmacy OSCEs and competency-based assessments</i> . Elsevier Health Sciences

**Oral Presentations – Postgraduate**

Abstract title	<b>An exploration of the development needs of mentees and mentors using a national mentoring program</b>
Author list	Melisa Chakarto <sup>1</sup> , Kina Vyas <sup>2</sup> , Rhona Auckland <sup>2</sup> , Helen Chang <sup>2</sup>
Affiliations of authors	<sup>1</sup> University of Nottingham, Nottingham, United Kingdom <sup>2</sup> Royal Pharmaceutical Society, United Kingdom
Presenting author email	<a href="mailto:paymc3@nottingham.ac.uk">paymc3@nottingham.ac.uk</a>
Keywords	Development, Mentoring, Pharmacy, Mentee, Mentor
<p><b>Background:</b> Mentoring is a process where an experienced individual guides a less able individual, for their personal or professional development (Ragins and Kram, 2007). Little information exists regarding mentoring in pharmacy, however other studies have found advantageous effects of mentoring programs (Cohen et al., 2007). The Royal Pharmaceutical Society (RPS) implemented a national mentoring programme in 2019 to support the professional development of pharmacists, however its' value to users has not been fully investigated.</p> <p><b>Aims:</b> To explore how mentee and mentor users of a national mentoring platform want to develop further, personally, and professionally.</p> <p><b>Method:</b> A mixed method approach was utilised. Two online surveys were designed and administered within Qualtrics. Survey one captured views of mentee relationships and their mentoring needs. Survey two focussed on views of mentor relationships, and their mentoring development requirements. Data was collected over two weeks in March 2021. Quantitative data was analysed using Statistical Package for the Social Sciences, SPSS version 27, and descriptive statistics performed. Qualitative responses were reviewed and thematically analysed.</p> <p><b>Results:</b> 1539 surveys were distributed with 126 returned (8.2% response rate), completed by mentor respondents (n=78) and mentee respondents (n=48). Findings suggested 57% of mentees used the programme for career development, and 11% cited a desire to improve career-related skills e.g., transitioning into a new role. Moreover, 62% of mentors would like to increase their overall mentoring competency, with 25% selecting guides and handbooks as the best method for this.</p> <p><b>Conclusion:</b> This study highlights the importance of enhancing <i>both</i> mentor and mentee skills to enable professional development and fulfil desires to progress. Predominantly mentees highly value career development support from mentors, whilst mentors require appropriate training to equip them with key mentoring skills. Future research could explore outcomes of mentoring relationships for mentees and the impact of training for mentors.</p>	
Reference list:	<p>Cohen, M.S., Jacobs, J.P., Quintessenza, J.A., Chai, P.J., Lindberg, H.L., Dickey, J. and Ungerleider, R.M. (2007). Mentorship, learning curves, and balance. <i>Cardiology in the Young</i>, 17(S4), pp.164–174.</p> <p>Ragins, B.R. and Kram, K.E. (2007). <i>The handbook of mentoring at work : theory, research, and practice</i>. Los Angeles: Sage Publications.</p>

**Oral Presentations – Postgraduate**

Abstract title	<b>Educational performance management of work-placed learning for foundation pharmacist Trainees Requiring Additional Support (TRAS) within multisector vocational training schemes.</b>
Author list	A.Conway <sup>1</sup> , S.Purdy <sup>1</sup> K.Reygate <sup>2</sup> .
Affiliations of authors	<sup>1</sup> East Sussex Healthcare NHS Trust, United Kingdom <sup>2</sup> Health Education England London and South East Pharmacy, United Kingdom
Presenting author email	<a href="mailto:Alice.Conway@nhs.net">Alice.Conway@nhs.net</a>
Keywords	Progression monitoring, educational performance management
<p><b>Background:</b> Within Foundation Pharmacist (FP) multisector vocational training schemes (VTS) educational and practice supervisors may uncover concerns, outside their educational remit including patient safety, professionalism or probity problems that are detrimental on FP progression.</p> <p><b>Aims:</b> Provide a standardised approach to progression monitoring and escalation, applicable to any multisector VTS where there may not be a defined external educational infrastructure linked to the learning programme.</p> <p><b>Method:</b> A bespoke TRAS matrix was adapted from existing guidance defining triggers for concerns with respective progressive escalation thresholds based on severity and expected actions at each stage. Significant concerns highlighted for urgent action with referral to wider support guidance including action plans and Health Education England reporting processes where applicable.</p> <p>Verbal minuted qualitative evaluation discussions of the matrix by East Sussex Multisector Foundation to Advanced<sup>1</sup> VTS stakeholders via programme local faculty group, responsible for programme's educational governance, prior to wider implementation. Ongoing qualitative evaluation of the matrix as an effective tool is discussed, following each implementation of the tool, to highlight effectiveness or adaptations required.</p> <p><b>Results:</b> The matrix has:</p> <ul style="list-style-type: none"> <li>• Supported differentiation and management of expectations within the scope of the developmental journey versus the job role</li> <li>• Encouraged transparency within the FP supervisor relationship, supporting identification of TRAS and embracing sensitivities around challenges of performance, progression or specific needs</li> <li>• Encouraged FP reflective practice to identify triggers for seeking further help</li> <li>• Developed capability following support with perceived weaker performance areas</li> <li>• Been underpinned by NHS constitutional values and professional standards</li> <li>• Empowered staff to appropriately escalate urgent problems</li> </ul> <p><b>Conclusion:</b> The TRAS matrix and supporting guidance is an essential process. There is transparency, consistency and empowerment showing that training aligns to the ethos of the NHS constitutional values, whilst ensuring wellbeing of both patients and FPs. This matrix could be incorporated into other multisector VTS educational training programmes</p>	
Reference list:	East Sussex Multisector Foundation to Advanced (MFtA) Vocational Training Scheme (2020). Available at <a href="https://www.lasepharmacy.hee.nhs.uk/dyn/_assets/_folder4/foundation-pharmacists-pages/vts/esbtvtsheewebsiteinformation.pdf">https://www.lasepharmacy.hee.nhs.uk/dyn/_assets/_folder4/foundation-pharmacists-pages/vts/esbtvtsheewebsiteinformation.pdf</a> Accessed 30 May 2021

**Oral Presentations – Postgraduate**

Abstract title	<b>Early-career pharmacists' and their supervisors' experiences of foundation training in general practice</b>
Author list	Ali Hindi <sup>1</sup> , Sarah Willis <sup>1</sup> , Ellen Schafheutle <sup>1</sup>
Affiliations of authors	<sup>1</sup> Centre for Pharmacy Workforce Studies, The University of Manchester, Manchester, United Kingdom
All author ORCID IDs	Ali Hindi: 0000-0002-1076-435X Ellen Schafheutle: <a href="https://orcid.org/0000-0001-7072-0888">https://orcid.org/0000-0001-7072-0888</a> Sarah C. Willis <a href="https://orcid.org/0000-0002-0368-0684">https://orcid.org/0000-0002-0368-0684</a>
Presenting author email	<a href="mailto:ali.hindi@manchester.ac.uk">ali.hindi@manchester.ac.uk</a>
Keywords	pharmacists, foundation training, general practice, primary care, placements, clinical supervision, experiential learning
<p><b>Background:</b> There is no all-England cross-sector training programme for newly-qualified pharmacists. Health Education England commissioned the South East London Foundation Pharmacist Vocational Training Scheme (SEL-FP-VTS) to feasibility-test possible models of multi-sector post-registration foundation training. (Health Education England 2021)</p> <p><b>Objective/Aim:</b> to evaluate implementation of general practice foundation placements for newly-qualified pharmacists on the SEL-FP-VTS, including enablers and barriers to a successful learning experience.</p> <p><b>Design/Method/Methodology:</b> Semi-structured telephone interviews with all eight SEL-FP-VTS foundation pharmacists and their 13 general practice (GP) based pharmacist and general practitioner (GP) supervisors covered placement expectations, trainees' learning/practice experiences, knowledge and skills gained, and competence/ confidence to apply these in the general practice setting. Data were analysed thematically.</p> <p><b>Results:</b> The main benefits of GP placements were seen as providing a good understanding of general practice and its place in the patient journey. Pharmacists particularly enhanced their holistic, patient-centred clinical decision-making and consultation skills. Supervision played a critical role in supporting gradual development of competence. Supervision was more direct initially, moving to more at arms-length (with pre-briefing and debriefing) to encourage foundation pharmacists to work increasingly independently in patient-facing activities. GP supervisors provided formal teaching/educational based support, while GP-based pharmacist supervisors provided day-to-day feedback and supervision. Interprofessional learning within the multidisciplinary team was viewed as essential. Foundation pharmacists and supervisors agreed that six months was the minimum duration for a GP placement, to allow foundation pharmacists to settle, learn, and contribute to clinical services. Concerns around continuation of service provision on placement completion were raised, despite foundation pharmacists being supernumerary. Moving forward, supervisors wanted more clarity around competency levels expected of foundation pharmacists.</p> <p><b>Conclusion:</b> This evaluation generated a multi-faceted understanding of factors impacting early career pharmacists' practice and learning in GP. This makes an important contribution to how best to support a pharmacist workforce able to practise clinically across settings.</p>	
Reference list:	Health Education England 2021, South East London Foundation Pharmacist Vocational Training Scheme (SEL FP VTS), viewed 18 05 2021, < <a href="https://www.lasepharmacy.hee.nhs.uk/early-careers/hee-pilot-programmes/">https://www.lasepharmacy.hee.nhs.uk/early-careers/hee-pilot-programmes/</a> >

**Posters – Postgraduate**

Abstract title	<b>Shared Learning Event Evaluation within East Sussex Multisector Pharmacist Programme</b>
Author list	A.Conway, S.Purdy
Affiliations of authors	Pharmacy East Sussex Healthcare NHS Trust United Kingdom
Presenting author email	<a href="mailto:Alice.Conway@nhs.net">Alice.Conway@nhs.net</a>
Keywords	curriculum, evaluation
<p><b>Background:</b> The East Sussex Multisector Pharmacist Foundation to Advanced Vocational Training Scheme (VTS) programme<sup>1</sup> provides structured work-based training, incorporating clinical governance, research, education and leadership skills. The locally developed curriculum is validated against Royal Pharmaceutical Society (RPS) professional development frameworks.<sup>2</sup></p> <p>It was proposed shared learning events (SLE) can foster peer development and interprofessional learning whilst ensuring programme curriculum coverage for participants working in multiple sectors of practice across primary and secondary care including acute, mental health, care homes, CCG and Primary Care Networks (PCN).</p> <p><b>Aims:</b></p> <ul style="list-style-type: none"> <li>• Create a SLE programme</li> <li>• Identify priority clinical areas for delivery complicit with the Network Contract Directed Enhanced Service (DES)</li> <li>• Share sector resources by extending SLE invitations to partner sectors.</li> <li>• Evaluate participant satisfaction</li> </ul> <p><b>Method:</b> A Task and Finish group (TFG) was assembled with sector educational leads. RPS frameworks, the DES and several postgraduate syllabi to identify key themes for delivery via a SLE series.</p> <p>SLE participants completed an online satisfaction questionnaire after sessions with a five-point Likert scale (0 being not useful, 5 being very useful). Participants identified what they had learnt, and how to apply learning. Qualitative comments were thematically analysed.</p> <p><b>Results:</b> TFG agreed SLE content, format and structure, scheduled for a full day, 4 weekly intervals, clinical themes subdivided into specific topics with flipped learning and Case Based Discussions (CbD).</p> <p>Participant numbers ranged from 8 to 16. Virtual delivery increased attendance. Overwhelming positive session evaluation, 4 common themes identified were:</p> <ul style="list-style-type: none"> <li>• Session relevance to practice, appreciation of attendance opportunity</li> <li>• Networking development sharing of practice</li> <li>• Benefit of focus on solutions to enhance patient transfer of medication from one sector to another and appreciation of working in different sectors</li> <li>• Benefit of pharmaceutical problem solving through CbD</li> </ul> <p><b>Conclusion:</b> Themes agreed supported alignment with DES requirements. SLE has strengthened networking and collaboration between sectors with virtual delivery continuing.</p>	
Reference list:	<p>East Sussex Multisector Foundation to Advanced (MFtA) Vocational Training Scheme (2020). Available at <a href="https://www.lasepharmacy.hee.nhs.uk/dyn/_assets/_folder4/foundation-pharmacists-pages/vts/esbvtvsheewebsiteinformation.pdf">https://www.lasepharmacy.hee.nhs.uk/dyn/_assets/_folder4/foundation-pharmacists-pages/vts/esbvtvsheewebsiteinformation.pdf</a> Accessed 30 May 2021</p> <p>Royal Pharmaceutical Society Foundation Pharmacy Framework (FPF). Available at <a href="https://www.rpharms.com/resources/frameworks/foundation-pharmacy-framework-fpf">https://www.rpharms.com/resources/frameworks/foundation-pharmacy-framework-fpf</a> Accessed 30 May 2021</p>

## Posters – Postgraduate

Abstract title	<b>Professionalism in the pre-registration pharmacist placement: an exploratory stakeholder study</b>
Author list	H. Ireland <sup>1,2</sup> , R. O'Rourke <sup>1</sup> , J. Sowter <sup>3</sup>
Affiliations of authors	<sup>1</sup> University of Leeds, UK <sup>2</sup> Pharmacy Workforce Development South, Bristol, UK <sup>3</sup> University of Bradford, UK
All author ORCID IDs	0000-0002-3232-3168 0000-0003-2299-1389 0000-0002-7689-4843
Presenting author email	<a href="mailto:Helen.ireland1@nhs.net">Helen.ireland1@nhs.net</a>
Keywords	Professionalism, Trainees, Patients, Transformative Learning, Pre-registration, Pharmacy
<p><b>Aim:</b> Interest in professionalism within UK healthcare has increased following reports of poor patient care and the development of patient-facing roles for pharmacists. This has led to questioning how professionalism is developed and assessed during pre-registration training. This novel study explores the General Pharmaceutical Council (GPhC), service users, pre-registration pharmacist trainees and pre-registration tutors from the South West of England perspectives into professionalism.</p> <p><b>Method:</b> An interpretative paradigm approach was adopted, involving one semi-structured interview with members of GPhC staff, qualitative e-questionnaire to tutors, one focus group with trainees and a separate focus group with service users. Active thematic interpretative analysis was used to identify, evaluate and consider patterns and meaning across all data sets.</p> <p><b>Results:</b> Trainees and tutors provided insights into transformative moments that happened during the training year to potentiate professionalism development. The first moment being issuing of the title “pre-registration trainee”. All groups reported constructive and meaningful interactions with patients in the workplace throughout the placement as aiding professionalism maturation from a ‘self-centred student’ to becoming an ‘outwardly looking and responsible professional’. Trainees and tutors reported <i>becoming</i> a professional was more than <i>doing</i>. Although no tutors reported patients formally provided direct feedback on trainees’ professionalism, service users wanted to be involved in the assessment. Tutors indicated the rate of professionalism development may be different across sectors of pharmacy practice, with community pharmacy facilitating faster professionalism maturation.</p> <p><b>Discussion:</b> This study proposes the existence of transformative moments and maturation periods during pre-registration. This study supports and extends the work by Cruess et al.,(2016), regarding the Miller’s pyramid (1990), by recommending the formal and consistent involvement of patients in how judgements are made on a trainee’s achievement of professionalism. Careful planning of training placements to enable different rates of professionalism development in different sectors of pharmacy practice needs to be considered.</p>	
Reference list:	Cruess. R. L, Cruess. S. R and Steinert, Y. 2016. Amending Miller's Pyramid to Include Professional Identity Formation. <i>ACADEMIC MEDICINE</i> . <b>91</b> (2), pp.180-185. Miller, G.E. 1990. The Assessment Of Clinical Skills Competence Performance. <i>Academic Medicine</i> . <b>65</b> (9), pp.S63-S67.

## Posters – Postgraduate

Abstract title	<b>Exploring the impact of sepsis e-learnings on knowledge and confidence levels among community pharmacists</b>
Author list	Annie Sellers <sup>1</sup> , Ellen Schafheutle <sup>2</sup> , Nirandeeep Singh Kaila <sup>2</sup> , Nina Wang Ni Chan <sup>2</sup> , Lesley Grimes <sup>1</sup>
Affiliations of authors	<sup>1</sup> Centre for Pharmacy Postgraduate Education (CPPE), <sup>2</sup> Division of Pharmacy and Optometry, The University of Manchester, United Kingdom
All author ORCID IDs	Ellen Schafheutle: <a href="https://orcid.org/0000-0001-7072-0888">https://orcid.org/0000-0001-7072-0888</a>
Presenting author email	<a href="mailto:annie.sellers@cppe.ac.uk">annie.sellers@cppe.ac.uk</a>
Keywords	community pharmacy, sepsis learning, pharmacy quality scheme (PQS)
<p><b>Background:</b> The pharmacy quality scheme (PQS) for 2019/2020 included sepsis e-learning (Pharmaceutical Services Negotiating Committee, 2019), developed by CPPE to equip pharmacy professionals to identify signs of sepsis, using the National Early Warning Score (NEWS) 2 (Royal College of Physicians, 2017).</p> <p><b>Objective/Aim:</b> To investigate the impact of the CPPE sepsis e-learning on community pharmacists' knowledge, perceived ability to recognise sepsis and their confidence to respond appropriately.</p> <p><b>Design/Method/Methodology:</b> A 36 item electronic questionnaire was developed, piloted and circulated via email to 5411 pharmacists who had passed the CPPE sepsis assessment. The questionnaire contained demographics questions and employed Likert-type agreement statements.</p> <p><b>Results:</b> The response rate was 3.4% (n=185). One-hundred-and thirty-two respondents (73.3%) were female, and the majority registered between 2000 and 2009 (52%). The most common reason given for completing the learning was because it was part of the PQS requirements (85.4%).</p> <p>The majority of respondents agreed the learning gave them the necessary knowledge (93%) and confidence (88.6%) to recognise the signs of sepsis and that the learning equipped them to respond to sepsis appropriately (94.6%) and feel confident in this ability (89.2%). Those who had encountered sepsis prior to undertaking it were significantly more likely (<math>X^2= 4.637</math>; <math>p=0.031</math>) to agree the learning had been relevant to their practice (91.8%) compared to those who had not (77.9%). Most respondents had not been familiar with any NEWS system prior to completing the learning (n=148; 80%), and NEWS2 specifically (n=156; 84.3%). Nineteen (10.3%) respondents indicated that they had used NEWS2 since completing the learning.</p> <p><b>Conclusion:</b> The majority of respondents indicated that the sepsis learning supported them to recognise and respond to learning in practice; recognising the relevance of learning was influenced by prior sepsis exposure.</p>	
Reference list:	<p>Pharmaceutical Services Negotiating Committee, 2019. PSNC Briefing 029/19: The Pharmacy Quality Scheme 2019/20. [online] <a href="https://psnc.org.uk/wp-content/uploads/2019/07/PSNC-Briefing-029.19-The-Pharmacy-Quality-Scheme-2019-20.pdf">https://psnc.org.uk/wp-content/uploads/2019/07/PSNC-Briefing-029.19-The-Pharmacy-Quality-Scheme-2019-20.pdf</a> [Accessed 19 May 2021].</p> <p>Royal College of Physicians, 2017. National Early Warning Score (NEWS) 2. [online] Available at: <a href="http://www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news-2">www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news-2</a> [Accessed 19 May 2021].</p>

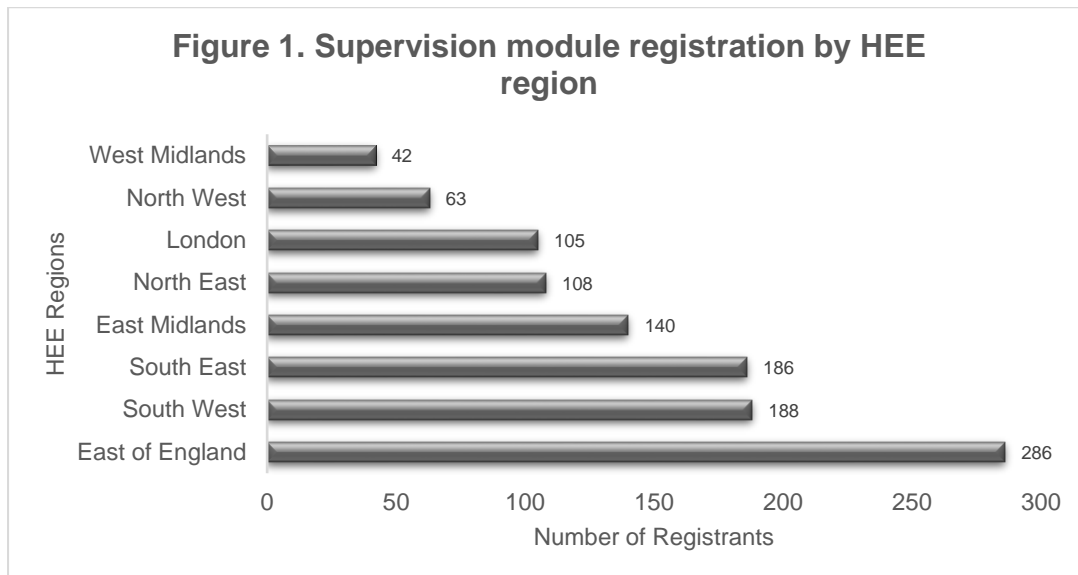
## Posters – Postgraduate

Abstract title	<b>Provision of support via drop-in sessions to learners and their educational supervisors on the Interim Foundation Pharmacist Programme</b>
Author list	Nkiruka Umaru <sup>1</sup> , Sejal Gohil <sup>1</sup> , Katie Reygate <sup>1</sup> , Aurora Diaz Lopez <sup>1</sup> , Anne Cole <sup>1</sup> , Jatinder Saimbi <sup>1</sup> , Shabina Azmi <sup>1</sup>
Affiliations of authors	<sup>1</sup> Health Education England, Interim Foundation Pharmacist Programme.
Presenting author email	<a href="mailto:Nkiruka.umaru@hee.nhs.uk">Nkiruka.umaru@hee.nhs.uk</a>
Keywords	Supervision, Interim Foundation Pharmacist Programme, Educational Supervisor, IFPP registrants, Provisionally Registered Pharmacists, drop - in sessions,
<p><b>Background:</b> The Interim Foundation Pharmacist Programme (IFPP) was established to support the development and practice of the 2019/20 cohort of pre-registration pharmacists whose typical path to qualification was disrupted by the COVID-19 pandemic (Health Education England (HEE), 2021). As part of the programme, drop-in sessions led by IFPP regional leads were offered to IFPP registrants and educational supervisors to provide support and help them to get the most from the programme.</p> <p><b>Aim:</b> To describe the engagement with the sessions and ascertain the most common questions and discussion topics that were supported during the drop-in sessions.</p> <p><b>Method:</b> Separate drop-in sessions were held for IFPP learners and educational supervisors. They were advertised via the IFPP newsletter and IFPP regional leads. Lunch time and evening sessions were offered to provide wider accessibility to the intended audience. Drop-in sessions covered a multitude of topics such as learning needs analysis, e-portfolio, 360-degree feedback, completion of the GPhC's registration exam and general queries.</p> <p><b>Results:</b> Nine drop-in sessions were delivered with a total attendance of 70 participants. Four were delivered to IFPP registrants and five to educational leads and supervisors. Common questions and discussions covered learning needs analysis (LNA), access to e-portfolio, understanding the different functionalities of the e-portfolio and how to update IFPP registrant's details. Positive feedback was provided by attendees either at the end of sessions or emailed after the session to the regional lead, leading the session.</p> <p><b>Discussion:</b> Feedback from attendees was very positive and demonstrates the value of these learning community support sessions (Haresnape et al., 2020). Queries raised at these sessions contributed to the FAQs section of IFPP website. Feedback from the sessions prompted the creation of Quick Guides for tools and processes which initially seemed challenging to navigate on the IFPP. The use of an evaluation form at the end of each session could have generated more detailed feedback.</p>	
Reference list:	<p>Haresnape JM., AikenFJ. &amp; Wynn NC. (2020). Sharing good practice and encouraging community cohesion online: a programme of tutor-led online events for Open University tutors. <i>Open Learning: The Journal of Open, Distance and e-Learning</i>. 35(1), pp. 1-23.</p> <p>Health Education England (HEE), 2021. Interim Foundation Pharmacist Programme (online). Available from <a href="https://www.hee.nhs.uk/our-work/pharmacy/national-training-offers-pharmacy-professionals/interim-foundation-pharmacist-programme">https://www.hee.nhs.uk/our-work/pharmacy/national-training-offers-pharmacy-professionals/interim-foundation-pharmacist-programme</a> Accessed 19th May, 2021</p>



## Posters – Postgraduate

Abstract title	<b>Uptake of clinical and educational supervision learning to support the Interim Foundation Pharmacist Programme for 2019/20 cohort of pre-registration pharmacists</b>
Author list	Nkiruka Umaru <sup>1</sup> , Sejal Gohil <sup>1</sup> , Katie Reygate <sup>1</sup> , Aurora Diaz Lopez <sup>1</sup> , David Gibson <sup>1</sup> , Jonathan Foster <sup>1</sup> , Helen Silcock <sup>1</sup>
Affiliations of authors	<sup>1</sup> Health Education England, Interim Foundation Pharmacist Programme.
Presenting author email	<a href="mailto:Nkiruka.umaru@hee.nhs.uk">Nkiruka.umaru@hee.nhs.uk</a>
Keywords	Supervision, Interim Foundation Pharmacist Programme, Educational Supervisor, Clinical Supervisor, Provisionally Registered Pharmacists
<p><b>Background:</b> The Interim Foundation Pharmacist Programme (IFPP) was established to support the development and practice of the 2019/20 cohort of pre-registration pharmacists whose typical path to qualification was disrupted by the COVID-19 pandemic (Health Education England (HEE), 2021). Part of the IFPP infrastructure included educational supervision to support those provisionally registered with the General Pharmaceutical Council and in practice. A key recommendation to support the educational supervisor role included participation in a recognised programme of learning such as the HEE Pharmacy Clinical and Educational Supervisor Core Skills Module developed by the University of East Anglia, Keele University and De Montfort University.</p> <p><b>Aim:</b> To describe relevant demographics of pharmacy professionals who accessed the online HEE Pharmacy Clinical and Educational Supervisor Core Skills Module.</p> <p><b>Method:</b> Routine data which included HEE region, sector of practice and professional group was collected upon registration to access the learning module between August 2020 and April 2021. Basic descriptive analysis was applied to the data set. Ethics approval was not required.</p> <p><b>Results:</b> A total of 1,118 pharmacy professionals registered for the online supervision module. This included 675 (60%) pharmacists, 434 (39%) pharmacy technicians and other category at 1%. The most common identified practice sector was hospital (864, 77%). Representation was ≤8% in other sectors of practice including CPPE (93), Community (79), Primary Care (43), Academia (33) and HEE (6). Figure 1 shows the online supervision module registration by HEE regions.</p> <p><b>Discussion:</b> Registration figures suggests that this has been a popular learning resource for pharmacy professionals across sectors. This encourages the development of resources to be used across all pharmacy sectors. The highest uptake was within the hospital sector. The low uptake in other sectors of practice such as Community and CPPE may be explained by the availability and access to similar training resources. The higher number of registrants in the East of England may reflect greater awareness of this resource in the region compared to others.</p>	
Reference list:	<p>Health Education England (HEE), 2021. Interim Foundation Pharmacist Programme (online). Available from <a href="https://www.hee.nhs.uk/our-work/pharmacy/national-training-offers-pharmacy-professionals/interim-foundation-pharmacist-programme">https://www.hee.nhs.uk/our-work/pharmacy/national-training-offers-pharmacy-professionals/interim-foundation-pharmacist-programme</a> Accessed 19th May, 2021</p> <p>Health Education England (HEE), 2021. Educational Supervisor/Tutor Training (online). Available from <a href="https://www.hee.nhs.uk/sites/default/files/documents/Overview%20SoPMO%20ES%20and%20PS%20training.pdf">https://www.hee.nhs.uk/sites/default/files/documents/Overview%20SoPMO%20ES%20and%20PS%20training.pdf</a> Accessed 19th May, 2021</p>



**Posters – Postgraduate**

Abstract title	Post-qualification pharmacy students' perception of the Objective Structured Clinical Examination.
Author list	Nkiruka Umaru <sup>1</sup> , Andrzej Kostrzewski <sup>1</sup>
Affiliations of authors	<sup>1</sup> University of Hertfordshire, Hatfield, United Kingdom
Presenting author email	<a href="mailto:n.e.umaru@herts.ac.uk">n.e.umaru@herts.ac.uk</a>
Keywords	OSCEs, Postgraduate Pharmacy, Assessment, Learning, Simulation
<p><b>Background:</b> Objective Structured Clinical Examination (OSCE) is an established clinical competence assessment used in healthcare professions. Established within the medical profession in the 1970s, non-medical healthcare disciplines have sought to evaluate and affirm its value in training (Kirton et al., 2011). Studies reporting on OSCEs within pharmacy have mainly focused on undergraduate and trainee pharmacist provisions including an evaluation of the learner's improvement and in appraisal alongside other methods. (Aranda et al., 2019). An exploration of OSCEs as an assessment method in the pharmacy post-qualification context is justified to inform development in education and training.</p> <p><b>Aim:</b> To explore the use of OSCE as a competency based assessment strategy in post-qualification pharmacy practice education and training.</p> <p><b>Methodology:</b> Methods were based on an inductive hermeneutic phenomenological research approach (Sloan et al., 2014). Focus group interviews were conducted with students who had experienced OSCEs at post-qualification level. Invitation to participate was sent through email to 35 students on a Postgraduate Diploma Pharmacy Practice programme. Audio-recorded data was transcribed and anonymised. Conventional content analysis was applied to facilitate data analysis and the development of themes. Ethical approval was granted for this study.</p> <p><b>Results:</b> Fifteen female students took part in two focus groups lasting for 30 minutes. OSCEs were viewed as a necessary assessment means to endorse clinical skills competency in practice. Failure was reported to have more negative significance due to the professionally registered status of participants. Replicability of real life practice was highly important to participants with suggestions to provide more practice opportunities to enable familiarisation with the OSCE process</p> <p><b>Discussion:</b> Formative OSCEs should be complementary to other learning methods if eventually used summatively for certification purposes. Wellbeing support systems are essential to guide the development of those needing support following an unsuccessful OSCEs outcome. A limitation was the lack of diversity in this study.</p>	
Reference list:	<p>Aranda, J. P., Davies, M. L., &amp; Jackevicius, C. A., 2019. Student pharmacists' performance and perceptions on an evidence- based medicine objective structured clinical examination. <i>Current in Pharmacy Teaching and Learning</i>, 11, pp.302-308.</p> <p>Kirton, S. B., &amp; Kravitz, L., 2011. Objective Structured Clinical Examinations (OSCEs) compared with traditional assessment methods. <i>American Journal of Pharmaceutical Education</i>, 75(6), p.111</p> <p>Sloan, A., &amp; Bowe, B. (2014). Phenomenology and hermeneutic phenomenology: the philosophy, the methodologies and using hermeneutic phenomenology to investigate lecturers' experiences of curriculum design. <i>Quality &amp; Quantity</i>, 48(3), pp.1291-1303.</p>