

**King's College London Master of Pharmacy  
(MPharm) degree interim - event report, February  
2021**



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## Event summary and conclusions

<b>Provider</b>	King's College London
<b>Course</b>	Master of Pharmacy (MPharm) degree
<b>Event type</b>	Interim
<b>Event date</b>	12 February 2021
<b>Current accreditation period</b>	2020/21 - 2022/23
<b>Relevant standards</b>	<a href="#">Future pharmacists Standards for the initial education and training of pharmacists, May 2011</a>
<b>Outcome</b>	Continued accreditation confirmed  The accreditation team agreed to recommend to the Registrar of the General Pharmaceutical Council (GPhC) that the MPharm degree provided by King's College London should continue to be approved until 2022/23, at which point the provision will be accredited against the Standards for the initial education and training of pharmacists 2021.
<b>Conditions</b>	There were no conditions
<b>Standing conditions</b>	The standing conditions of accreditation can be found <a href="#">here</a> .
<b>Recommendations</b>	No recommendations were made
<b>Registrar decision</b>	Following the event, the Registrar of the GPhC accepted the accreditation team's recommendation and approved the continued accreditation of the programme until 2022/23.
<b>Key contact (provider)</b>	Dr Sukhi Bansal, Head of Department of Pharmacy
<b>Accreditation team</b>	Professor Chris Langley (Team Leader) Professor of Pharmacy Law & Practice and Head of the School of Pharmacy, Aston University; Deputy Dean, College of Health and Life Sciences*  Professor Barrie Kellam (Team member-academic) Professor of Medicinal Chemistry, University of Nottingham  Sandra Hall (Team member-academic) Retired Head of Pharmacy Practice, Leicester School of Pharmacy, De Montfort University  Gail Curphey (Team member-pharmacist) Pharmacy consultant  Alex Moore (Team member-pharmacist recently registered) Teacher Practitioner University of Sunderland and community pharmacist at

	Whickham Pharmacy Fiona Barber (Team member-lay) Independent Member, Leicester City Council
<b>GPhC representative</b>	Damian Day, Head of Education, GPhC*
<b>Rapporteur</b>	Dr Ian Marshall (rapporteur) Proprietor, Caldarvan Research (Educational and Writing Services); Emeritus Professor of Pharmacology, University of Strathclyde
<b>Observers</b>	Ahmed Aboo (observer – accreditation panel member in training) Associate Professor in Pharmacy Practice, De Montfort University*  Dr Hayley Wickens (observer – accreditation panel member in training) Lead Pharmacy Training Programme Director (South), Health Education England

\*participated in pre-event videoconference on 22 January 2021

## Introduction

### Role of the GPhC

The General Pharmaceutical Council (GPhC) is the statutory regulator for pharmacists and pharmacy technicians and registered pharmacies and is the accrediting body for pharmacy education in Great Britain (GB). The GPhC is responsible for setting standards and approving education and training courses which form part of the pathway towards registration for pharmacists. The GB qualification required as part of the pathway to registration as a pharmacist is a GPhC-accredited Master of Pharmacy degree course (MPharm).

This interim event was carried out in accordance with the GPhC's 2011 *MPharm Accreditation Methodology* and the course was reviewed against the GPhC's 2011 education standards *Future Pharmacists: Standards for the initial education and training of pharmacists*.

The GPhC's right to check the standards of pharmacy qualifications leading to annotation and registration as a pharmacist is the *Pharmacy Order 2010* (<http://www.legislation.gov.uk/uksi/2010/231/contents/made>). It requires the GPhC to 'approve' courses by appointing 'visitors' (accreditors) to report to the GPhC's Council on the 'nature, content and quality' of education as well as 'any other matters' the Council may require.

## Background

The King's College London (KCL) integrated Master of Pharmacy (MPharm) programme was accredited by the Royal Pharmaceutical Society of Great Britain in 2004. Fundamental science was taught in the first year as the basis for integrated teaching in subsequent years forming the basis of an enhanced programme in 2009. This programme was accredited for five years with several commendations. Over the next few years, the science-into-practice theme for the MPharm programme was developed while incorporating flexibility to facilitate the changing portfolio of staff, and innovative modules were developed including *Emerging Therapeutics and Modern Medicine* incorporating the debate concept and a *Dragons' Den* exercise. In 2014, the MPharm programme was accredited for a full period with no conditions or recommendations. At the scheduled interim event in 2017 the following condition was set: Once the review of management in the Faculty of Life Sciences and Medicine in relation to Pharmaceutical Sciences has been completed, the University must submit formal documentation to the GPhC detailing how this will impact on the MPharm degree. This related to standards 2, 4, 8 and 9. The Head of Department confirmed to the GPhC the appointments to the headship of the Institute of Cancer and Pharmaceutical Sciences and the Department of Pharmacy in August 2020.

## Documentation

Prior to the event, the provider submitted documentation to the GPhC in line with the agreed timescales.

1. Department of Pharmacy Staff List
2. MPharm Accredited Programme 2014
3. Proposed MPharm Programme 2021
4. MPharm Professional Portfolio
5. MPharm Fitness to Practise Guidance
6. MPharm Placement Handbook 2019-20
7. COVID Risk Assessment for MPharm Students
8. Personal Tutor Record-Keeping
9. FTP Summary of Reportable Cases
10. Pharmacy Department Committees
11. Role Description Module Organiser
12. External Examiners Report 2016-2020
13. Department of Pharmacy -Nation Student Survey Review
14. Focus groups, Students, Patients, Pre-reg, Employers
15. NHS Foundation Trust Pharmacy Placement Providers MOA
16. MPharm Placement Health and Safety Checklists

17. PSCAG Letter of Support 2014
18. Clinical Placement Student Feedback Form
19. MPharm Experiential Learning Overview
20. IPE Review and Presentation 2020
21. Module Evaluation Data
22. You Said We Did Pharmacy Poster
23. Raising Concerns -KCL Process
24. King's Together Application
25. BAME attainment gap of MPharm students 2014-2019
26. Medicines Discovery and Development [6BBP0361] Mini Projects Student Feedback Form Data
27. MPharm Research Outputs
28. MPharm to PhD
29. MPharm Assessment Strategy
30. BSUG Marking and Assessment Policy 2018-19
31. Marking Criteria King's College London
32. MPharm Year 4 Project Feedback Form 1
33. Pharmacy Student Champions and Tutees Illustrative Feedback
34. Performance Development Review Process King's College London
35. Mentor Guide King's College London
36. Peer Observation of Teaching Form King's College London
37. Academic Promotion Round Guidance for Education and Research Staff
38. Academic Promotion Round Guidance for Academic Education Pathway
39. Staff CVs
40. Consultation Skills Suite Clinical Pharmacy Lab
41. MPharm Year Handbook 2020-21
42. MPharm Programme Handbook 2020-21

The following documents were submitted after being requested at the prevent meeting:

Programme Regulations and Programme Specification

Business Plan

The documentation submitted was that already prepared for the scheduled full reaccreditation event due in 2021, but it was agreed by the GPhC that the documentation would be considered for the interim event. The documentation was reviewed by the accreditation team and was deemed to be satisfactory to provide a basis for discussion.

## Pre-event

In advance of the main event, a pre-event meeting took place via videoconference on 22 January 2021. The purpose of the pre-event meeting was to prepare for the event, allow the GPhC and the University to ask any questions or seek clarification, and to finalise arrangements for the event.

## The event

Due to the COVID-19 pandemic, the GPhC modified the structure of the event so that it could be held remotely. The event was held via videoconference between King's College London and the GPhC on 12 February 2021 and comprised a series of meetings between the GPhC team and representatives of the MPharm programme.

## Declarations of interest

There were no declarations of interest.

## Schedule

### Day 1 – 11 February 2021

Meeting number	Meeting	Time
1.	Accreditation team leader meeting with GPhC representative	13:30 – 13:50
2.	Private meeting of the accreditation team and GPhC representative	14:00 – 15:45

### Day 2 – 12 February 2021

Meeting number	Meeting	Time
3.	Private meeting of the accreditation team	09:00 – 09:30
4.	Progress meeting including presentation (Focusing on Standards 1,2,7,8 and 9)	09:30 – 11:30
5.	Private meeting of the accreditation team	11:30 – 11:45
6.	Admission, progression, monitoring and support meeting (Focusing on Standards 3, 4, 5 and 6)	11:45 – 12:45
7.	Private meeting of the accreditation team	13:30 – 13:45
8.	Significant pedagogical developments presentation (Focusing on Standards 5 and 10) Including presentation	13:45 – 14:30
9.	Student meeting	14:45 – 15:45

10.	Private meeting of the accreditation team	15:45 – 16:45
11.	Delivery of outcome to programme provider	16:45 – 17:00

## Attendees

### Course provider

#### The team met with the following representatives of the University:

Name	Designation at the time of accreditation event	Meetings attended
Professor Ajay Shah	Interim Dean of Faculty	4
Professor Helen Collins	Dean of Bioscience Education	4
Keith Newton	Chief Operating Officer Faculty of Health and Life Science	4
Professor Ben Forbes*	Head of Institute of Pharmaceutical Science	4, 6, 8, 11
Professor Graham Davies	Professor of Therapeutics	4, 6, 8
Dr Sukhi Bansal*	Reader in Chemical Biology & Head of the Pharmacy Department	4, 6, 8, 11
Dr Jignesh Patel*	Reader in Anti-coagulation & KHP Consultant Pharmacist	4, 6, 8, 11
Dr Richard Parsons	Senior Lecturer & Sub-Assessment Board Chair	6, 8
Janique Waghorn	Placement Coordinator	6, 8
Professor Khuloud Al-Jamal	Research Project Lead	
Dr Stuart Jones	Reader in Pharmaceutics	6, 8
Dr Driton Vllasaliu	Year 3 Lead	6, 8
Dr Anita Toscani	Senior Tutor	6
Dr Cecile Dreiss	Diversity and Inclusion Lead	6
Khilna Shah	Boots Teacher Practitioner	6
Rita Shah	KHP Link Pharmacist	8
Dr Miraz Rahman	Reader in Medicinal Chemistry	8
Helen Costello	Statutory Quality Manager	6
Jonathan Lopez-Real	Senior Quality Officer	6
Dr Paul Royall	Senior Lecturer in Pharmaceutics	6

\* participated in pre-event videoconference on 22 January 2021

The team also met a group of students/pre-registration trainees, two students from each of Years 1-3, three students from Year 4 and three trainees.

## Key findings

### Standard 1: Patient and public safety

Standard continues to be met? Yes  No

The team noted that all first-year pharmacy students are introduced to professionalism as part of Induction. During the programme induction Fitness to Practise procedures and the concept of beliefs, culture and patient safety are also explained to students. Students must undertake Disclosure and Barring Service (DBS) checks at the start of the degree as a condition of any offer; further DBS checks are made at the start of each subsequent year. Students complete a starter health check and are assessed by Occupational Health, again as a condition of any offer. The roles and responsibilities of students while on placement are outlined, and further detail is provided in the MPharm Placement Handbook. Where any issues relating to student professional behaviour occur while on placement workplace supervisors will instruct the student to amend their behaviour or leave the clinical environment. Students are taught to deal with aspects of clinical capability and professional behaviour and are expected to adhere to the appropriate codes of conduct. All concerns are investigated and may be referred to the relevant Fitness to Practise Committee, if appropriate; students must sign a declaration that they have read and understood that Fitness to Practise is a part of their professionalism compulsory tasks. The team was told that there had been only a small number of low-level fitness to practise cases. The core competencies elements of the programme include issues relating to patient safety where any incident that causes patient harm results in a failed mark being recorded; each of these components must be passed individually at the specified higher level.

### Standard 2: Monitoring, review and evaluation of initial education and training

Standard continues to be met? Yes  No

Pharmacy is a teaching department of the School of Bioscience Education within the King's Faculty of Life Sciences & Medicine. The Head of the Pharmacy Department is responsible for the academic activities within the Department. The management and coordination of the undergraduate MPharm programme in the Department is overseen by the Departmental Education Committee; during the COVID-19 pandemic this group has been meeting weekly for programme planning. The day-to-day running of the MPharm programme is the responsibility of module leads working in tandem with year leaders. The quality of the programme is evaluated at a number of levels from internal feedback mechanisms to proxy markers such as the results of the National Student Survey and the success of King's (KCL) graduates at the GPhC Registration Examination. Comments received from the External Examiners have been very positive, highlighting the quality of the students' experience and the integrated nature of the programme. The performance of KCL graduates in the GPhC Registration Examination has remained consistently high with first attempt pass rates normally above the national average. The National Student Survey results over the last five years have been generally satisfactory. Clinical teaching and placements are provided on the current programme, with extensive use made of the clinical environments within the Trusts that constitute King's Health Partners with health and safety procedures, including appropriate student supervision, liability

insurance, risk assessments of work practices, formal procedures for reporting incidents, in place at the community pharmacies and hospital pharmacy sites. Feedback is provided to students using a variety of formats. Students are supervised in all laboratory-based practical class and in the clinical environment. The team was told that student intake has remained constant at approximately 140 per annum over the last ten years, with a consistent home/overseas balance with approximately 15% overseas students, despite a shrinking applicant pool. The resource allocation model supports the delivery of the programme to this number, including provision for clinical teaching and placement experience. The team noted an unusually high attrition rate, particularly from Year 1 to Year 2, and most obvious from the current final year cohort. The provider's representatives were unable to explain satisfactorily clear discrepancies in the progression data presented but referred to lack of engagement as a potential primary cause; they agreed to investigate the issue as a matter of urgency. The team will expect to be presented with a more robust analysis of progression and attrition data at the next accreditation event. The quality of teaching, learning and assessment is monitored, reviewed and evaluated systematically in an institutional internal rolling review on a six-year cycle. The last review of the MPharm was undertaken in February 2015, shortly after the programme was last reaccredited fully by the GPhC. Module evaluations are undertaken on an annual basis and students are invited to complete an online survey relating to the content, teaching quality, assessments, clinical placements and structure of the course. Extensive consultation has been undertaken to inform the design of the MPharm programme; a number of focus groups were conducted with patients, mixed-year and final-year current students and pharmacists.

Changes due to the COVID-19 pandemic for the 2020-21 session include all lectures and small group work being delivered remotely, using a range of asynchronous and synchronous approaches. Laboratory classes are currently using simulations and data analysis to deliver the material until it is deemed safe for students to return to campus to undertake their practical work. Practical skill sessions will be delivered once the crisis is sufficiently controlled to allow this to be done safely. If this is not possible by the end of the academic year, simulation training will be provided and the programme adjusted for following years to ensure that students graduate with the required skill set. Students who could not travel to King's during the first semester had access to all material delivered which is either pre-recorded or recorded during a live online session. To support student learning there are timetabled additional weekly student catch-up sessions. Placements for the early years will be carried out remotely. Third and fourth-year placements take place guided by COVID-19 risk assessments. Thus, Year 3 placements were able to take place between October and December 2020 observing social distancing, but Year 4 placements are being carried out online. Where students are not able to be on campus, they will carry out activities remotely or near their locality. The provider did not consider that the students had missed the main elements of the placement experience. End of year assessments and OSCEs will be carried out online.

### Standard 3: Equality, diversity and fairness

Standard continues to be met? Yes  No

Equality and Diversity training is compulsory for all staff and training courses are organised centrally by the College. Equality monitoring data for KCL students are collected upon registration and centrally by the Admissions team. Information about how the Department is performing in terms of meeting the widening participation targets is provided by the central Admissions Office and

supplied to the School annually. The Department operates a fair and transparent admissions process in partnership with the Admissions Office. All students are sent information about disability/dyslexia advice and are encouraged to speak to the Student Support Team in advance of the start of term so that the Department can make provision for any adjustment required. The Department has a policy on *Reasonable adjustments in teaching and assessment for students with specific learning difficulties* that has been developed in collaboration with the King's Equality, Diversity Office & Inclusion Committee. The submission noted that there are large disparities within the various ethnic groups on the programme. Analysis of data relating to the number of first-class honours degrees obtained by BAME students over a number of years remains mostly consistent whereas there is variability in the number of White students achieving first-class honours due to their low enrolment numbers. The team was told that there have been no major concerns about progression according to gender, age, ethnicity, qualifications or disability. Nonetheless, the team noted the lack of data presented to support this and will look forward to the outcome of the College-wide *Bridging the Attainment Gap – a Pathway to Equality in Healthcare* project, launched in March, that will include Pharmacy and will gather both quantitative and qualitative evidence to understand and address the root causes of any student attainment gap.

#### Standard 4: Selection of students *and* trainees

Standard continues to be met? Yes  No

Information about the course is available on the admissions website with details about the entry requirements, how to apply, non-academic entry requirements, and within the printed KCL prospectus. It is proposed to reinforce the current selection and admissions process by assessing the professional skills and attributes of applicants in addition to their predicted A-level grades. This selection procedure will be an interview, followed by a group questions and answers session, and including a visit to King's Health Partners locations at Guy's and St Thomas' Hospitals to help applicants understand the current role of a pharmacist. The admissions process is centralised through the Admissions Office and the Department of Pharmacy has an Admissions Tutor responsible for overseeing the process and organising the interview and open days. The standard A-Level offer is AAB which must include Chemistry and at least one of Mathematics, Biology or Physics, but applications will be considered from students predicted up to two grades lower than this, or who have already achieved one grade lower than this with AB in Chemistry and the other required subject. A personal statement is then assessed for knowledge, understanding and experience in pharmacy and or a healthcare-related field such as medicine or dentistry. Contextual offers are made to those applicants whose personal circumstances may have impeded their academic progress. Contextual offers are two A-Level grades or equivalent lower than the entry requirement. The team was told that the first year, consisting mainly of basic science subjects had been designed to bring the range of abilities in the entrants to a common level. The Department of Pharmacy also accepts students who have non-traditional qualifications, typically the Access to HE Diploma in Science, or a Foundation Diploma with a significant chemistry emphasis. In the majority of cases, no credit is given for prior learning or qualifications. All students must start the course at Year 1 of the MPharm degree course and must attend and complete all associated modules. The team was told that recruitment has not been impacted by the COVID pandemic with numbers normal for 2020-21 and with an increase for projected 2021-22 numbers although applicant numbers have decreased over the years.

## Standard 5: Curriculum delivery and student experience

Standard continues to be met? Yes  No

The basic programme structure contains largely 30-credit modules with five basic pharmaceutical science modules leading into the teaching of science alongside practice in seven integrated modules, using key therapeutic areas as a focus in six of these, for example, *Nervous System, Cardiovascular and Renal Systems, Endocrine System and Cancer, Gastrointestinal System and Skin*. Additionally, in Year One a module *Principles of Clinical Care* introduces students to clinical care and draws on the relevant science in the decision-making process. Material specific to the professional role of the pharmacist is integrated within these therapeutic modules using a multi-disciplinary approach. In the final year *Clinical Decision-Making* focuses on the management of complex patients using an inter-disciplinary approach. In addition, there are four non-credit bearing professional modules in each year that incorporate the core competencies, including patient safety and legal compliance, calculations, clinical experiential learning and the MPharm professionalism checklist, with all these components being pass/fail. In the final year students apply their knowledge and skills to design and carry out a research project that spans the whole of Semester One in which they are expected to demonstrate their independence as they engage in the design, planning, analysis and presentation of their research findings.

Since the last full accreditation in 2014 the overall placement experience has been doubled. Clinical exposure develops from basic shadowing of pharmacists during the first year to focusing on the safe dispensing, information retrieval, problem identification and prioritisation in Year Two. Third and fourth year students undertake clinical problem-solving using evidence and guidance to inform their recommendations, recognising the impact of co-morbidities, and other factors, on the decision-making process. By the end of the final semester, they will work alongside a senior pharmacist from across King's Health Partners. Students complete a range of professionalism portfolio tasks for each year of study and submit these for approval by their personal tutor; academic staff members have received professionalism training to support this activity. In the first year during their inter-professional education students engage with simulated patients where the focus is on promoting patient safety through person-centred communication using a team approach. Second Year students further engage with simulated patients focusing on the skills required to consult with patients to elicit a medication history, along with consultations with hospitalised patients to focus on issues relating to the use of medicines in patients with respiratory, cardiac and mental health problems. In addition, students will spend the equivalent of 30 hours in a practice setting. In Year Three there is a hospital internship in which students engage with patients selected by their hospital supervisors and follow their journey as part of a multi-disciplinary team, along with a Socialisation internship to develop appropriate clinical empathy; the Department helped students who could not find suitable internships due to the pandemic with alternative essays to complete. In the final year, students spend a week working alongside a senior pharmacist to optimise medicines use in more complex patients. During the COVID-19 pandemic, London-based students are allocated to either Guy's, St Thomas' or King's College Hospitals for five consecutive days to review patients on the wards, a trans-disciplinary approach. Students not located in London will consult with patients remotely and discuss the cases with a pharmacist. The team was told that it was likely that online teaching would continue in the next academic year but that there was a desire to return to face-to-face practical classes and placements as soon as possible.

Diagnostic assessments feature prominently in the first year of the programme and all modules

contain formative assessments. All modules are assessed using a standard approach where the written examination contributes 60% and the coursework 40%. Normally, the majority of the written examination papers adopt a standard format using a multiple-choice question (MCQ) section, short answer questions and long answer questions, plus there is a variety of coursework assignments/assessments. Assessments include objective structured clinical evaluations, portfolios, oral examinations, demonstrations, written reports and critical essays. Patient-facing components where attainment above the normal academic level is required must be passed. Evidence of unsafe practice in a component of Core competencies results in a failure in patient-facing assessments in years 2 - 4. The team was told that the Department had reviewed the learning outcomes and their assessment in 2018, before the COVID pandemic but as a result of the pandemic there has been a redesign of the assessment format to include online assessments, including OSCEs. There is a fair assessment policy to ensure that no student is disadvantaged by COVID. Additionally, the Year One contribution to the degree classification, normally one eighteenth, has been removed. The team noted that long answer questions had been removed from the assessment schedule, a change that an external examiner suggested had led to some grade inflation in 2019-20. The team was told that the examinations had been open-book style online tests but that the College was investigating the introduction of online proctoring to improve the security of online assessments.

## Standard 6: Support and development for students *and* trainees

Standard continues to be met? Yes  No

King's Academic Skills for Learning offers support to students to develop independent learning, focusing on key skills for learning, including writing, presenting, reading, evaluating information, academic integrity, and referencing and using technology for studying. Students are assigned to a Personal Tutor at Induction who is the first point of contact for all pastoral or academic issues with tutoring taking place at least three times a year, recorded centrally and followed up if necessary. For academic issues the student is expected to first contact the member of staff responsible for teaching that subject; students told the team that they are free to contact any member of staff and that staff members are very helpful. Students are provided with detailed information on the personal tutor system and staff members are provided guidance on maintaining their personal tutor records. In addition, the College has an extensive range of student support services all in one location and accessible via the VLE, plus there is a BPSA scheme available concerning student mental health. Students are required to complete Professionalism Portfolio each year which is monitored by the personal tutor. There is a Staff-Student Committee which students described as being effective and which feeds back the results of its deliberations. In terms of the attainment gap referred to under Standard 3 above, the team was told that there have been no gender differences in performance but that the Department has provided ambassadors to help with religious issues in relation to students interacting with clinical situations. Additionally, there have been changes made to timetables to provide flexibility to allow religious observance along with partial attendance at tutorials and practical classes. More live tutorials have been provided to support students with difficult studying conditions and spaces in the library can be reserved for quiet study. Students interviewed told the team that although the current COVID pandemic had proven stressful, they had been very well supported by the Department. Online teaching was described as being less effective than face-to-face teaching, but the students recognised that it was essential and that the Department had done as much as it could to provide an alternative approach to teaching and experiential learning, including arranging for actors to replace patients for consultations. Students

missed the opportunity to undertake laboratory work although they agreed that the Year 3 mini-project was a useful preparation for the final year project. The Department also provides information on job opportunities and students told the team that they valued the experience of working in pharmacies in their spare time

### Standard 7: Support and development for academic staff and pre-registration tutors

Standard continues to be met? Yes  No

Staff development and training procedures provide guidance and support for staff, to improve communication within the Department and across disciplines, and to enable the College to ensure a high-quality teaching and research performance. There is a comprehensive induction programme for all new staff members. New staff members are appointed on the condition that they complete a Kings Academy training programme, which supports staff development with learning and teaching programmes, a graduate teaching assistant development programme, staff seminars and core workshops, and is recognised by the Higher Education Academy (HEA). Non-pharmacist academic staff members are supported to deliver contextualised teaching to ensure that teaching reflects current practice by each academic team responsible for a year of the MPharm programme containing a member of the clinical pharmacy practice teaching section. All staff is accountable to the Head of Department, but the day-to-day management is devolved to year leads and module leads with annual staff appraisal conducted by the research group lead and teaching head. Peer support of teaching is achieved through a School-wide peer-support system. The team was told that the COVID pandemic had been challenging for staff but that there was strong support from the College, allowing flexibility of working, extra administrative support for departments, and IT training to support online teaching.

### Standard 8: Management of initial education and training

Standard continues to be met? Yes  No

Management of the Department of Pharmacy is vested in the Head of Department with the MPharm degree programme being the responsibility of the Department Education Committee, currently chaired by the Head of Department. Each year has a professional lead that has oversight of the professional elements of the year and a programme perspective, and who works with module leaders and teams to draw on the relevant expertise to deliver and assess the content. The MPharm programme has its own Sub-Assessment Board, which reports its decisions and degree classification recommendations to the Undergraduate School Assessment Board for ratification. The Senior Tutor chairs the Staff-Student Liaison Committee (SSLC) reporting to the Department Education Committee. Placements are managed by the Placement Monitoring & Review Committee, which reports directly to the Departmental Education Committee and is led by the Academic Placement Coordinator.

### Standard 9: Resources and capacity

Standard continues to be met? Yes  No

The submission recognised that there could be significant change within the financial planning timeframe, should the MPharm move from a four- to a five-year model, but there is an ongoing

development in other aspects of the MPharm, such as the growth in clinical placement activity. The team was told that the College was in a good financial position and that its highest priority for funding was education with capital and research projects likely to be impacted by any shortfall before teaching; the team was told that there was no threat to pharmacy education. Key components of the business planning cycle from an education/academic perspective are staffing, non-pay resource and facilities. The MPharm intake for 2020-21 was 145 with a total MPharm population of 495, supported currently by 40 academic staff, representing 32.4 FTE, 25 of whom (16.4 FTE) are GPhC-registered, along with 8.5 FTE support staff. There are currently five academic staff vacancies with three appointments to be made in Spring 2021; the team was told that the recruitment would be from a broad range of pharmaceutical specialities. Non-pharmacist staff members provide specialist expertise, including clinical psychology, pharmacology, chemistry, microbiology, immunology and engineering. Physiology and pharmacology teaching is provided by expert staff from other teaching departments in the School of Bioscience Education. Staff members in the Department operate in a research-intensive environment where all staff members are involved in both undergraduate and postgraduate teaching so that both research and education are reviewed at the annual Professional Development Review meeting. All staff members have a line manager for teaching and research to support both activities. For teaching, the year modules' team with three modules leads, a year lead and a professional lead will support both pharmacist and non-pharmacist staff.

The Department of Pharmacy is based primarily on the fifth floor of the Franklin-Wilkins Building, Waterloo campus, which was subject to a major re-development 15 years ago and has since been modernised and upgraded, containing library, computing and social facilities together with classrooms, lecture theatres, teaching and research laboratories and specialist facilities such as the Dispensary Studio. The Clinical Pharmacy Education Centre is a clinical pharmaceutical centre, housing simulation equipment to educate pharmacy and other healthcare undergraduates on all aspects of medicines use in the future. A purpose-built Clinical Pharmacy Consultation Skills Suite is used to develop the skills of students with respect to consultation skills, near-patient testing, clinical skills assessment, as well as providing an environment to assess the clinical skills of students during OSCEs. A Clinical Pharmacy Skills laboratory provides facilities for teaching a range of essential pharmacy skills including dispensing skills, consultations, and responding to symptoms. The team was told that all these specialist pharmacy facilities were completed before the onset of the COVID pandemic.

## Significant pedagogic developments

Four case studies were presented to the team.

### Case Study 1 - MPharm 3 Hospital Internships

**Background & Objective:** Current clinical experiential learning opportunities for MPharm students do not provide the opportunity for students to follow patients through their treatment to fully understand the clinical decision-making process in clinical practice. The objective of this activity was to give students the opportunity to observe and begin to develop their clinical decision-making skills and professional socialisation through role-modelling by registered pharmacists.

**Pedagogic underpinning:** This placement encourages students to move up through the levels of Bloom's taxonomy by providing them with opportunities to apply their knowledge, analyse information and behaviours, synthesise holistic care plans and evaluate their practice.

**Design:** During their placement in clinical pharmacy teams at Guy's and King's College Hospitals, students attended wards for two hours every day for two weeks, where they were assigned no more than four patients to review each day. The placement enables students to follow a patient's journey and understand the rationale for clinical decisions and follow the outcome of the treatment. Students spend two hours a day for two consecutive weeks in the hospital ward in the first semester, and then to return for a further week (two hours a day) in the second semester. Students carry out workbook guided tasks to review patients, reflect for future practice and identify development needs.

**Results:** The results of the student evaluation indicated high student satisfaction and consistency regarding student-supervisor interactions, learning opportunities in the ward and the workbook tasks. Both students and supervisors indicated that placements were well organised and beneficial. Students carried out daily drug histories and patient reviews and observed the journey of patients from admission to discharge. Students had a significantly more enhanced opportunity than in previous years to care for and interact with a range of patients.

**Conclusion:** The overall perception of the placement experience was positive. The philosophy of the placement strategy is that time on placement is time well spent, so the focus from now will be addressing supervisor training challenges before any further increase in placement hours is considered.

## Case Study 2 - Interprofessional Education

**Background & Objective:** Interprofessional education (IPE) is a collaborative pedagogical approach for preparing future healthcare professionals to be influential team members in the healthcare system to address complex medical issues. IPE has been introduced throughout the MPharm programme. A competency framework developed internationally has been adapted to shape interprofessional education provision within KCL.

**Design:** At King's College London, the Centre for Team-Based Practice & Learning in Health Care facilitates IPE with the health faculties to bring together students from differing disciplines to learn with, from, and about each other to enhance their ability to work in effective collaborative teams.

In the first year, IPE is focused on communication with members of the multidisciplinary healthcare team and understanding each other's role in caring for patients. In the second year, the focus shifts to the management of a particular therapeutic area – in this case, pain management – using virtual patients. This concept is further developed in the third year when patient educators who live with a mental health condition work with the students to develop care plans. In the final year, medication errors are discussed using 'real' medication incidents which have occurred in healthcare, and students undertake a root cause analysis and develop preventative strategies through collaborative working.

**Results:** All participants highlighted the benefits gained from IPE and the improvement in knowledge and skills of students when working with other healthcare professionals.

**Conclusion:** The IPE offering within the MPharm programme allows students to understand their

specific role within the wider healthcare team and develop their confidence in making contributions to patient care in a multidisciplinary context, preparing them for clinical practice. Additionally, in academic year 2020-21 an interactive 360° patient home environment is being piloted to facilitate the interprofessional learning project.

#### **Related papers/conference-seminar presentations (including poster presentations)**

An investigation into the use of an interactive 360° patient home environment to facilitate interdisciplinary learning. POSTER Presentation. 5th European Congress of the ER-WCPT on Physiotherapy Education; September 2020.

#### **Case Study 3: Telling things: Ethnography of Pharmacy university students' recipe-like science laboratory classes**

##### **Background & Objective:**

Science laboratory classes continue to be a significant component of a pharmacy university education despite the educational literature persistently questioning their effectiveness (Kirschner and Meester, 1998) in that the virtues of these interactions and how they facilitate student learning is not entirely understood. The aim of this work was to explore student interactions with the non-human entities in traditional 'recipe-like' laboratory MPharm science practical classes.

**Method:** This was an ethnographic study, which recorded students' talk and action with a tripod-mounted video-camera and two wireless lapel-microphones. Data were collected in six classes for 12 weeks. Audio transcription was made by a private-sector firm and then revised/corrected by the two authors/analysts working independently and then together.

**Results:** The 'telling' operations, i.e. the process of counting, measurement etc., that ties a name (or label) to the properties, which matter, to distinguish this 'thing' from another 'thing' was central to the practical. As a consequence, the final analysis of the data was presented as a series of 'telling' vignettes: telling weights and volumes; telling with machines and indicators; telling qualities and telling on the surface of the product. In this vignette, the students mobilise the properties of experimental products, learning to distinguish solvents, creams and emulsion-types. These telling operations included silent kinaesthetic elements and new cognition. Although the lab classes comprised human work, they also showed the agency of chemicals and suggested an apprenticeship to these non-linguistic products was an essential element to laboratory learning.

**Conclusion:** The solvents, creams and emulsions employed in the laboratory sessions appeared to become pedagogic entities that taught students, and this suggests that the non-linguistic side of science laboratories touches the development of human sensitivities, which alternative linguistic teaching approaches cannot.

#### **Related papers/conference-seminar presentations (including poster presentations)**

This study was presented at the Pharmacy Education Conference, Manchester, in 2019

#### **Case Study 4: Medicine Discovery and Development Mini-projects for Students**

**Background & Objective:** Students spend an entire semester on the Year Four MPharm research project in different settings to generate and analyse data and write up a research dissertation. The medicines discovery and development module mini projects in Year Three were designed to prepare the students for their independent research projects in Year Four and give them opportunities to develop their research and decision-making skills.

**Pedagogic underpinning:** The mini project enables the students to move up through the levels of Bloom's taxonomy by providing them with opportunities to apply their knowledge to research scientific databases, generate and analyse research data, evaluate the key findings, construct and summarise the results in a written report.

**Design:** The 6-day mini-project had four streams: making drugs, making proteins, making medicines, clinical pharmacology. During the mini-project, the students were required to independently design experiments, generate data and utilise products/data from their experiments for subsequent steps. They were required to interact with students working in other streams and go through learning materials to enable an understanding of concepts taught in different streams. Finally, they produced a research poster and a 3000-word report, which were assessed.

**Results:** The feedback from students suggested they enjoyed this new type of assessment. They found the projects well-structured, interactive, challenging and intellectually stimulating. They particularly commented on the positive influence of the mini-projects on their confidence to perform laboratory experiments independently. Their positive engagement with the mini-projects was reflected in their performance in the summative components, as the students scored on an average ~70% in each stream.

**Conclusion:** The mini-projects enhanced the learning experience of the students. The range of activities helped them to develop independence in performing practical work and tackle problems using their scientific knowledge and judgment in a laboratory setting.



