

Reaccreditation of a Master of Pharmacy degree course (MPharm)

University College London

Report of a reaccreditation event, 23-25 April 2013

Introduction

The General Pharmaceutical Council (GPhC) is the statutory regulator for pharmacists and pharmacy technicians and is the accrediting body for pharmacy education in Great Britain. The GPhC is responsible for setting standards and approving education and training courses which form part of the pathway towards registration for pharmacists. The UK qualification required as part of the pathway to registration as a pharmacist is a GPhC-accredited Master of Pharmacy degree course (MPharm). The GPhC's right to check the standards of pharmacy qualifications leading to annotation and registration as a pharmacist is the *Pharmacy Order 2010*. 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.

This reaccreditation 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'.

Background

The MPharm degree is delivered by the University College London (UCL) School of Pharmacy, which is one of four divisions in the Faculty of Life Science within the School of Life and Medical Sciences. The School merged with UCL in January 2012, having previously been a college within the federal structure of the University of London. A new director, Professor Duncan Craig, took up his appointment on 1st January 2013. The last accreditation, by the Royal Pharmaceutical Society of Great Britain (RPSGB) was in May 2006, with full accreditation being given for five years. On that occasion, the team imposed no conditions but made five recommendations. As the accreditation was undertaken against the RPSGB criteria then operating, reference is made below to the relevant GPhC standard (Appendix 1). The recommendations were:

- i. The School should revise the aims of the course to include specific reference to patients (relevant to standard 5.6)
- ii. The remit of the new committee established to oversee the completion of the new Molecular Pharmacy building should be expanded to include MPharm teaching and social spaces (relevant to standard 9.1h).
- iii. The School should consider increasing computer provision and social/study spaces (relevant to Standard 9.1g, 9.1h)
- iv. The School should review the law provision, particularly to ensure that the pass-mark and number of resits is appropriate, reflecting sectorial norms (relevant to standard 5.9). In response to this recommendation, following a review by the appropriate members of staff and in consultation with the then external examiners, the School decided to keep the pass mark at 40 % but to reduce the number of attempts to a maximum of two (unless extenuating circumstances apply).
- v. The School should make students aware of local Society branches and their activities (relevant to standard 5.3)

The course being considered during the present reaccreditation is a completely new programme, with a greater focus on integration and cross-reference between the science and practice of pharmacy, and a clearer emphasis on preparation for professional practice, in whichever sphere of pharmacy the student will work. Following the merger with UCL at the beginning of 2012, and beginning the process of renewal of the MPharm programme in preparation for the new GPhC standards, the course was modified structurally, as shown in the documentation presented to the accreditation team. This had resulted in a transition period, with students currently in year 1 following the restructured programme through to its completion in 2016. Students in later years will have followed the course accredited in 2006 for various periods of time. Thus, students currently in years 3 and 4 followed the previous course for their first two years, while those currently in year 2 followed the previous course for their first year. The restructured course outlined in the documentation will be maintained for these students, to ensure continuity and completeness of coverage. However, it is anticipated that, where practicable, changes made for the new MPharm programme, which commences in September 2013, will also be included in the delivery of material for the current cohorts of students. This includes, for example, increases in student contact with patients and the public through increased utilisation of the Green Light Pharmacy Education Centre and hospital placements. Students who, for whatever reason, need to take time out from their studies and return to a different cohort will be assessed on an individual basis in determining their transfer between versions of the course.

Due to the introduction of the new pharmacist education standards during 2011, the GPhC agreed to consider extension requests from any university due to undergo reaccreditation of their MPharm degree during the 2010/2011 academic year, to allow universities adequate preparation time for reaccreditation to the new education standards. The London School of Pharmacy applied for a one year extension and this was subsequently granted by the GPhC, extending the accreditation until 2011/2012. However, due to the merger with UCL in January 2012, this was extended further and a reaccreditation event was subsequently scheduled for April 2013. The outcome of this event is detailed within this record.

Documentation

The provider submitted submission documentation to the GPhC in line with agreed timescales, and a pre-visit took place at the UCL School of Pharmacy on 27 March 2013. During the pre-visit, the schedule of meetings and timings for the reaccreditation event were confirmed, and the GPhC requested that several additional documents be submitted ready for the event.

The event

The event began with a private meeting of the accreditation team and GPhC representatives on 23 April 2013. The remainder of the event took place on site at the UCL School of Pharmacy on 24 and 25 April 2013; this comprised a series of meetings with staff and students of the University and included a tour of the University facilities.

Accreditation team

The GPhC's accreditation team ('the team') comprised:

Name	Designation at the time of accreditation event
Dr Andrew Husband*	Accreditation team leader, Dean of Pharmacy, School of Medicine, Pharmacy & Health, Durham University
Professor Brenda Costall	Accreditation team member (Academic), Professor of Neuropharmacology, former Head of School of Pharmacy, University of Bradford
Professor Stephen Denyer	Accreditation team member (Academic), Deputy Pro-Vice-Chancellor (Education and Students) and Professor of Pharmacy, Cardiff University
Mr Mark Brennan	Accreditation team member (Pharmacist), Director of Undergraduate Studies for Pharmacy and the Director of Learning and Teaching for the Faculty of Health, Keele University
Mrs Barbara Wensworth	Accreditation team member (Pharmacist), Former hospital Pharmacist, Lecturer at Bradford College, Freelance Lecturer, External Verifier, assessor and writer
Mr Alan Kershaw	Accreditation team member (Lay), specialist in professional registration

along with:

Name	Designation at the time of visit
Ms Joanne Martin *	Quality Assurance Manager (Education), General Pharmaceutical Council
Mr Damian Day	Observer, Head of Education and Registration Policy, General Pharmaceutical Council
Professor Brian Furman	Rapporteur, Emeritus Professor of Pharmacology, University of Strathclyde
Mrs Gail Curphey	Observer, Community Pharmacist and Pharmacy Consultant
Dr Ruth Cartwright	Observer, Principal Pharmacist at Trent Medicines Information Service, Leicester
Ms Jane Robinson	Observer, Head of Communications, General Pharmaceutical Council (day 2 only)
Mr Owen Wood	Observer, Manager, Community Pharmacy

*attended pre-visit meeting on 27 March 2013

Declaration of potential conflicts of interest

Professor Furman obtained his pharmacy degree from the School of Pharmacy as an external candidate in 1966. Ms Martin had been involved in Pharmaceutical Technician examination boards. Professor Denyer had been external examiner in the School in the 1990s. The team agreed that none of these represented a conflict of interest.

Meeting the accreditation standards

	Accreditation team's commentary
<p>Standard 1 – Patient and public safety</p> <p>There must be clear procedures to address concerns about patient safety arising from initial pharmacy education and training. Concerns must be addressed immediately.</p>	<p>The documentation described how students are introduced to professionalism, the concept of 'fitness to practise' and the GPhC Code of Conduct for Pharmacy Students during the induction week at the start of year 1, and are inculcated with the idea that patient safety must be their top priority; all elements of the code are reinforced continuously throughout the programme. Students are instructed in tasks in a safe environment at the School, and must demonstrate competence before having contact with patients and the public; they are supervised at all times when undertaking placements in hospital or community pharmacy. When being assessed, the students will automatically fail if they make errors which, in real life, would cause harm to a patient.</p> <p>Criminal Records Bureau (CRB) checks, self-declarations of health and occupational health assessments are undertaken; issues arising from these may be referred to the School's Fitness to Practise (FTP) panel for review. Students must comply with relevant health requirements before participating in any hospital placements and the placement hosts are requested to notify the School directly if they have reason to believe that a student may pose a risk to patients.</p> <p>The team was confident that this standard is met.</p>
<p>Standard 2 – Monitoring, review and evaluation of initial education and training</p> <p>The quality of pharmacy education and training must be monitored, reviewed and evaluated in a systematic way.</p>	<p>The Director of the UCL School of Pharmacy is responsible for all academic activities within the School. The Director reports to the Dean of the Faculty of Life Sciences, who in turn reports to the Vice Provost (i.e. the Head) of the School of Life and Medical Sciences; the Vice Provost then reports directly to the Provost (equivalent to the Vice-Chancellor in other universities).</p> <p>The quality of teaching, learning and assessment is monitored externally through QAA Institutional review, as well as internally using UCL monitoring procedures. The latter comprises a yearly course monitoring process (Annual Monitoring) and a 6-yearly in depth review process (Internal Quality Reviews). Within the School, the responsibility for ensuring the quality of teaching, learning and assessment rests with the School's Undergraduate Programmes Committee. Students complete an electronic survey at the end of every module, capturing such data as the students' perception of the quality of teaching provision. Comments on staff performance will be fed back to the staff on a confidential basis, with a view to</p>

	<p>improvements, if necessary. Student opinion also reaches the School through its Staff-Student Consultative Committees, which meet regularly and frequently, allowing speedy identification and resolution of any issues. In addition, an Open Forum is held at the end of each semester, at which any student can raise any issue or concern. External examiners submit reports each year and the School responds to their comments, making changes where required. The Undergraduate Programmes Committee reviews the overall outcomes of the programme at the end of each academic year.</p> <p>The quality of hospital placements is addressed through the School's participation in a formalised partnership between the NHS and the HE sectors; this partnership is known as the Joint Programmes Board (JPB) and its main function is to provide post-qualification, workplace-based pharmacy education and training in a structured way. All of the NHS Training Centres involved are accredited according to a robust model, and are re-accredited at least every 3 to 4 years. The hospital placement training for undergraduate pharmacy students uses only these accredited NHS sites, with a view to ensuring quality and that the sites have working knowledge, training skills and sufficient resources. Service Level Agreements are in place with each of the training sites, ensuring their long-term commitment to the provision of placements, as well as the availability of suitably qualified tutors and supervisors. Formal feedback from both students and placement hosts is collected each academic year, with a view to continuous improvement.</p> <p>The team was confident that this standard is met.</p>
<p>Standard 3 – Equality, diversity and opportunity</p> <p>Initial pharmacy education and training must be based on principles of equality, diversity and fairness. It must meet the requirements of all relevant legislation.</p>	<p>UCL has a core policy on 'Equality and Diversity' to which all subsections of the university and all university staff are required to adhere (see http://www.ucl.ac.uk/hr/equalities). Equality monitoring data for UCL staff are gathered centrally and reviewed by UCL Human Resources, while the corresponding data for students are collected upon registration and reviewed by UCL Registry and Academic Services. Information about how the School is performing in terms of meeting its widening participation targets is provided periodically; the School is performing well in these areas. The School has a Disability Coordinator, who advises staff and students on disability-related issues. Students with disabilities are assessed by the UCL Disability Office, who will make recommendations as to any required adjustments. The School has recently undergone a series of renovations to make it fully accessible to people with disabilities.</p> <p>'Equality and Diversity' training is compulsory for all staff, with newly appointed staff being required to successfully complete the training within one month of appointment. The training covers all areas of discrimination and describes the implications of the Equality Act 2010 in both the employment and educational contexts. Students are introduced to the concept of 'Equality and Diversity' through the GPhC Code of Conduct for Pharmacy Students.</p> <p>The team was confident that this standard is met.</p>

<p>Standard 4 – Selection of students and trainees</p> <p>Selection processes must be open, fair and comply with relevant legislation. Processes must ensure students and trainees are fit to practise at the point of selection. Selection includes recruitment and admissions.</p>	<p>The admissions process for all students is managed centrally by the UCL Admissions team, who ensure compliance with all relevant legislation. However, day to day management of the admissions process is devolved to the Faculty of Life Sciences and the School. General information about both UCL and the School is available on the websites (www.ucl.ac.uk and www.ucl.ac.uk/pharmacy). Specific information about studying pharmacy is available on the School's website. This includes, for example, information about how to apply, entrance requirements, the GPhC Code of Conduct for Pharmacy Students, open days, and fees charged. All selection criteria are explicitly stated on the School's website and in printed material relating to the admissions process. This includes the academic requirements and professional entry (GPhC) requirements.</p> <p>All students must undergo a CRB check upon registration at the School, and they are informed of this as part of the admissions process. Non-UK students are asked to organise obtaining a 'Letter of Good Character' from a suitable professional body in their home countries to be submitted to the School when they arrive. Students are asked to fill in a self-declaration form before they start; this includes health conditions that may affect their fitness to practise or that may necessitate some adjustment to the teaching or assessment process.</p> <p>The team was confident that this standard is met.</p>
<p>Standard 5 – Curriculum delivery</p> <p>The curriculum for MPharm degrees and the pre-registration scheme must deliver the outcomes in Standard 10. Most importantly, curricula must ensure students and trainees practise safely and effectively.</p>	<p>The documentation described the curriculum, demonstrating how it delivers the outcomes in standard 10, and how it integrates all aspects of pharmaceutical sciences and practice, with repeated cross-reference between subjects to produce graduates who are equally comfortable with all spheres of pharmacy. The course is built out of modules, with four modules in each year, and has four educational streams running through all four years; these streams are 'pharmacy practice', 'chemical sciences', 'formulation sciences', and 'biological sciences and therapeutics'. The year 1 'pharmacy practice' module introduces dispensing, checking and professional skills in the dispensary; this module also considers formulation and medicine delivery and this continues into the pharmacy practice modules in years 2 and 3. Several drugs are used as common examples in all four year 1 modules to form an integrated strand, addressing the relevant chemistry, pharmacology and delivery, as well as adherence support, monitoring, and evidence-based treatment. This approach is repeated in years 2 and 3. The course covers clinical therapeutics and demonstrates how all aspects of drugs and medicines are firmly grounded in the pharmaceutical sciences. Students will understand and be able to explain the aetiology and pathophysiology of common diseases and the scientific rationale behind relevant therapeutic interventions. The clinical use of medicines, evidence-based medicine and clinical guidelines are explored. Fundamental knowledge is revisited in the final year, where students must apply this knowledge to independent learning on a range of therapeutic issues. In the final year, students also consider how science may affect public health, the treatment of disease and the practice of pharmacy in the future; they also undertake an extensive, independent research project. The curriculum demonstrates progression, dealing with science and pharmacy practice at increasing levels of complexity throughout successive years. The programme provides a variety of opportunities for students to apply theory into practice. Thus, students gain practical experience of working with patients and other health professionals through activities that include practical classes, simulations, tutorials, workshops, and</p>

	<p>placement visits. Students are required to reflect on and remedy any deficiencies; this is facilitated by the advising scheme which focusses on development and enhancement of study skills and professional behaviour.</p> <p>UCL and the School have an underpinning set of academic regulations which govern the conduct of students, both academically and personally. The regulations include, amongst others, progression requirements and the rules regarding plagiarism and collusion. Professionalism is reinforced through the GPhC Code of Conduct for Pharmacy Students, and understanding of fitness to practise. Students are expected to show professional behaviour at all times, whether at the School or when they are on placements. They are aware that unprofessional behaviour may result in their being referred to the Fitness to Practise Committee for investigation and potential sanction. Students are assessed for safe practice, and where in an assessment they make mistakes that in real life would lead to patient harm, they will fail that assessment.</p> <p>The team was confident that this standard will be met.</p>
<p>Standard 6 – Support and development for students and trainees</p> <p>Students and trainees must be supported to develop as learners and professionals during their initial education and training.</p>	<p>Each student has a personal adviser, who is a member of academic staff; one of the functions of the adviser is to help students to develop their learning skills, including learning and revision techniques, mathematical skills and communication skills. At the beginning of years 2, 3 and 4, the adviser and advisee will have a detailed discussion of the educational achievement of the student in the previous year and the goals for the forthcoming year. Advisers are available at any time to provide general guidance on study skills, and are normally the first point of contact for discussion of any issue; the adviser may however refer the student to more specialist help where appropriate. Throughout the programme, students will be expected to maintain a personal portfolio, which should contain personal development plans, records of achievement, continuing professional development updates, CVs and reflections on their placements; this portfolio is developed with the help of the student's adviser.</p> <p>For purely academic issues, the student is expected to contact the relevant member of academic staff, or the module coordinator if the issue is more module-based. The Programme Director is available for discussion with a student about academic matters, or a student may be referred to the Programme Director if there is concern over performance or behaviour.</p> <p>Students who are working off site will be assigned to a registered pharmacist as their placement host; this person will be able to provide advice, support or referral as required.</p> <p>The team was confident that this standard is met.</p>
<p>Standard 7 – Support and development for academic staff and</p>	<p>UCL has an annual, formal, supportive 'Appraisal, Review and Development' scheme for all staff. During the appraisal process, members of staff are encouraged to review their training needs and access courses as required, for example, as</p>

<p>pre-registration tutors</p> <p>Anyone delivering initial education and training should be supported to develop in their professional roles.</p>	<p>provided by the UCL Centre for Advancement in Learning and Teaching (CALT). Additionally, and separately from the appraisal scheme, the School has initiated a mentoring scheme for newly-appointed staff. The mentor acts as a guide and a supportive friend during the initial period at the School. In addition to the staff appraisal scheme and the mentoring programme for new staff members, UCL has a free and confidential Employee Assistance Programme (EAP); this is available to all staff and run independently of the academic structures of the university. EAP offers help, advice and counselling on a range of issues, including work-life balance, managing stress and personal financial management.</p> <p>UCL has a formal 'Probation' scheme for staff with limited previous academic experience. This is a supportive mechanism for staff members and ensures that they are competent to undertake all relevant duties. Probation usually lasts for three years, with interim and final reviews, before the staff member is signed off as being an independent academic. Within the School, the requirements of the probation scheme are incorporated into the appraisal and mentoring schemes. All academic staff members are normally required to have a teaching qualification. Those without prior teaching qualifications are expected to enrol on the "Professional Certificate in Teaching and Learning in Higher and Professional Education" course provided by the Institute of Child Health.</p> <p>There is an induction programme for all new staff members; this includes general information applicable to all staff, such as orientation around the building, safety procedures, financial procedures, UCL policies and an explanation of the specific details of the MPharm programme. Non-pharmacists have a detailed induction programme on the MPharm course and pharmacy generally; this aims to demonstrate how the science and practice of pharmacy are inter-related, and how the individual's particular subject area fits into the broader field of pharmacy. There is also a series of one-on-one shadowing exercises, where a non-pharmacist academic member of staff spends several hours with a pharmacist following his or her normal daily work.</p> <p>Continuing professional development (CPD) is expected and encouraged; all UCL employees must undertake a minimum of three learning events per year, which may for example be attendance at a conference or participation in a course. The School likewise encourages all staff to undertake relevant CPD to comply with the requirements of their professional bodies. UCL allows members of academic staff who have worked at UCL for three years to take sabbatical leave to undertake research or other appropriate study related to their academic or professional field. In addition, staff may be eligible to take study leave for short periods, if they are registered as undertaking further study as part of their UCL employment.</p> <p>The team was confident that this standard is met.</p>
<p>Standard 8 – Management of initial education and training</p>	<p>The School Undergraduate Programme Committee, chaired by the Programme Director, is responsible for the management of the MPharm programme; this covers all aspects of educational provision and development, including the course structure, the assessment strategy and the placements strategy. This committee, in turn, reports into the School's Divisional Teaching</p>

<p>Education and training must be planned and maintained through transparent processes which must show who is responsible for what at each stage</p>	<p>Committee which has overall responsibility for all academic programmes in the School. Internal monitoring of the programme includes annual monitoring, end-of-module feedback from the students, and the year-group Divisional Staff-Student Consultative Committees, which provide forums for discussion between the staff and students.</p> <p>Each module is managed by a leader and deputy leader. There is also a separate year coordinator for each of the four years; these individuals do not have direct module management responsibility within that year, but oversee each year to ensure full integration across the modules of each year of study and vertically between each of the four years of study. Departmental heads of teaching are responsible for ensuring integration of material among the four years and completeness of coverage, as well as a fair distribution of workload for the teaching staff.</p> <p>Student attendance is compulsory at all practical, dispensary, workshop and seminar sessions, as well as at all placements, while attendance at lectures is not compulsory. Year coordinators review student attendance and will call in persistent absentees for a discussion. Deliberate absenteeism from placements may result in referral to the Fitness to Practise Committee.</p> <p>The team was confident that this standard will be met.</p>
<p>Standard 9- Resources and capacity</p> <p>Resources and capacity are sufficient to deliver outcomes.</p>	<p>The School of Pharmacy is a division within the UCL Faculty of Life Sciences, which along with the Faculties of Medical Sciences, Brain Sciences and Population Health Sciences form the School of Life and Medical Sciences (SLMS). The budget is devolved to the School of Pharmacy, which also has access to various sources of funding within UCL; the School has been awarded UCL estates funding of some £1.5M towards the refurbishment and modernisation of some of the undergraduate teaching facilities, for which the School has already earmarked £1.8M of its own resources, and has obtained a £200k grant from the Wolfson Foundation.</p> <p>The School has 60 academic staff, with further posts being advertised currently, as well as 65 technical and administrative staff and 15 support staff. Twenty members of academic staff are GPhC-registered pharmacists and several staff members have pharmacy degrees but are not currently registered. All academic staff members are expected to act as personal advisers for students. There are also five teacher practitioners, all of whom are pharmacists. Students will also have contact with the pharmacy staff at the NHS partner hospitals and the Green Light Pharmacy Education Centre. Members of staff in all four departments comprise a mixture of experienced and more recently-appointed staff. As well as extensive experience in academic pharmacy at the School and at other universities, the pharmacist staff members have a broad range of experience in the wider pharmacy world, including hospital, community and industrial practice, and NHS and pharmacy politics. The non-pharmacist staff members have a diverse range of academic backgrounds, including medicine, veterinary medicine, biology, pharmacology, chemistry, biochemistry, microbiology, physiology and psychology. All the members of academic staff in the science departments, as well as ten of the pharmacy practice academic staff, possess PhD degrees. 16 members of staff possess a formal teaching qualification and 3 are currently undertaking a teaching qualification.</p>

The recently refurbished IT suite has 78 places with 'thin client' computer terminals; similar facilities are offered elsewhere, including the library and the computer room within the main teaching laboratory, giving a total of 129 virtual desktops. Wireless access is available throughout the building and across the rest of the UCL campus; this can be accessed via the students' own laptops, or laptops borrowed from the library. The virtual desktops can be run on students' own devices, including laptops, iPad and Android tablets, thus providing access to specialist software. Printing facilities are available in the main IT Suite and in the library.

The School has its own specialist pharmaceutical science library, which also covers the broader biomedical spectrum. The library holds a large collection of print volumes and a wide range of databases, electronic journals, and ebooks, with access both on-site and off-site. The library offers a range of study spaces, including silent spaces and rooms bookable by students for group work activities. School staff and students can access all of the library and electronic resources of UCL, both at the central library and departmental libraries.

The School has several seminar rooms and two main, fully equipped lecture theatres, both of which can accommodate a full year cohort of 200 students. One of the lecture theatres can also be subdivided into three smaller seminar rooms and further partitioned into private carrels, which are used for assessments. A further classroom within the IT suite has 30 places with PC provision for small-group computer assisted learning. There are four fully equipped undergraduate science-based teaching laboratories within the School; these comprise a general chemistry and pharmaceuticals laboratory, a pharmacology/biochemistry laboratory, a microbiology/biotechnology laboratory and an instrumental laboratory. The School also has a specialist sterile unit, in which students are instructed in the techniques of sterile pharmaceutical manufacturing and aseptic production. The pharmacy practice suite comprises a fully equipped dispensing laboratory which can accommodate up to 28 students at a time for dispensing and other pharmacy activities. There are three consultation rooms attached to the dispensary for small group and communication skills teaching. There is a full range of medicines, on lockable dispensary shelving, which are used in dispensing practical classes, updated as required by the syllabus. There are plans to double the teaching space in pharmacy practice by building a clinical pharmacy education centre adjoining the dispensary. This will contain six further consultation rooms, a bench of computers, cabaret style seating for 25 students, and closed circuit cameras for recording consultation exercises. It is anticipated that the building project will be completed by September 2014.

The Green Light Pharmacy Education Centre is currently undergoing a programme of expansion, which will allow a greater level of interactive teaching in a clinical setting; this will be ready for the academic year 2013/2014.

The team was confident that this standard is met.

<p>Standard 10 - Outcomes</p>	<p>The team scrutinised the learning outcomes by discussions with the teaching staff in two parallel subgroup sessions. Rather than examining each of the 58 outcomes, a selection of nine outcomes was chosen for detailed discussion, and a further outcome was discussed in a separate meeting with the students. The UCL School of Pharmacy staff members were unaware of the outcomes to be discussed before the meeting. For each of the ten outcomes scrutinised in detail, the evidence provided by the discussions with the staff and students, along with other evidence provided within the documentation, gave the team confidence that these outcomes would be met at the required level. As this selection represented approximately 17% of the total outcomes, the team was confident that all other outcomes would be similarly met. This view was supported by the documented material for each of the other outcomes, which had also been scrutinised by the team, as well as by discussions with members of staff addressing standards 1-9.</p> <p>The team was confident that this standard will be met.</p>
<p>Indicative Syllabus</p>	<p>The team was content with the School's use of the Indicative Syllabus to inform its curriculum.</p> <p>The team agreed that the MPharm degree met the requirements of Directive 2005/36/EC of the European Parliament and of the Council on the recognition of professional qualifications for the initial education and training of pharmacists.</p>

Summary and conclusions

The accreditation team agreed to recommend to the Registrar of the General Pharmaceutical Council that the University College London School of Pharmacy should be reaccredited to provide an MPharm degree for a further period of six years, with a practice visit to take place in three years. There were no conditions or recommendations. The accreditation team identified the following area of strength:

The accreditation team would like to recognise the successful relationship that has been developed by University College London and its School of Pharmacy.

Standing condition of accreditation:

These are the conditions which will apply in all circumstances of degree accreditation:

1. The school or department of pharmacy always seeks approval from the General Pharmaceutical Council for curriculum amendments and always at least informs the General Pharmaceutical Council of significant changes to pharmacy undergraduate student numbers or resources for their teaching, learning support and assessment, including any change from internal to teaching, learning and assessment from outside the school or department;

2. The school or department of pharmacy produces and submits to the General Pharmaceutical Council annually requested data on student numbers and progression and degree awards;
3. The school or department of pharmacy produces and submits to the General Pharmaceutical Council annually requested information about the extent of human and physical resources it enjoys for the delivery and support of the degree course;
4. The school or department of pharmacy or the university makes students and potential students aware of the existence and Internet address where they can view the General Pharmaceutical Council's summary reports of degree accreditation exercises, main after- actions therefrom and of the timetable for future accreditation exercises.

The *Pharmacy Order 2010* states:

Part 5 Education, training and acquisition of experience and continuing professional development, Information to be given by institutions or other providers, 46. ...

(3) Whenever required to do so by the Council, any institution or other provider to which this article applies must give to the Council such information and assistance as the Council may reasonably require in connection with the exercise of its functions under this Order.

(4) Where an institution or other provider refuses any reasonable request for information made by the Council under this article, the Council may, in accordance with article 47 ('Refusal or withdrawal of approval of courses, qualifications and institutions'), refuse to approve or withdraw approval from, any course of education or training, qualification, test or institution or other provider to which the information relates.

It is a requirement of accreditation that institutions or other providers provide the GPhC proactively and in a timely manner with any information which is, or has the potential to be, material to the delivery of an accredited course. This includes, but is not limited to: changes in staffing, changes in funding, and/or substantial changes in curriculum or delivery.

Reference: <http://www.legislation.gov.uk/uksi/2010/231/contents/made>

Caution: Preregistration and employment as a pharmacist:

- In respect of all students, successful completion of an accredited course is not a guarantee of a placement for a pre-registration year or of future employment as a pharmacist.

Following the above reaccreditation event, the Registrar of the General Pharmaceutical Council agreed with the accreditation team's recommendation and approved the University College London MPharm degree for reaccreditation a further period of 6 years. Reaccreditation will take place in six academic years' time, with an interim practice visit in three academic years' time (2015-16).

Appendix 1 – Standards for the initial education and training of pharmacists

[**Note:** The parts of the standards shown in grey italics are applicable only to those offering a 5-year MPharm degree with integrated periods of pre-registration training.]

Standard 1 – Patient and public safety

1. There must be clear procedures to address concerns about patient safety arising from pharmacy education and training. Concerns must be addressed immediately.

1.1. There must be effective systems in place to ensure that students *and trainees*:

- 1.1.a do not jeopardise patient safety;
- 1.1.b only do tasks for which they are competent, sometimes under supervision;
- 1.1.c are monitored and assessed to ensure they always practise safely. Causes for concern should be addressed immediately;
- 1.1.d have access to support for health, conduct and academic issues;
- 1.1.e must not be awarded an accredited degree *or pass pre-registration training* if they might pose a risk to patients or the public;
- 1.1.f understand what is and what is not professional behaviour and are familiar with the GPhC's *Code of Conduct for Pharmacy Students (2010) Standards of conduct, ethics and performance (2010)*;
- 1.1.g understand what fitness to practise mechanisms apply to them. All schools of pharmacy must have fitness to practise procedures to deal with student causes for concern;
- 1.1.h undergo required health and good character checks;
- 1.1.i understand that it is an offence to impersonate a pharmacist. Pharmacists are registrants of the GPhC.

Standard 2 – Monitoring, review and evaluation of initial education and training

2. The quality of pharmacy education and training must be monitored, reviewed and evaluated in a systematic and developmental way.

2.1 There must be systems and policies in place covering :

2.1.a information about roles & responsibilities and lines of accountability;

2.1.b university information on:

2.1.b.i entry requirements;

2.1.b.ii the quality of teaching, learning and assessment;

2.1.b.iii the quality of placements and other practice learning opportunities;

2.1.b.iv appraisal and feedback systems for students and trainees;

2.1.b.v supervision requirements;

2.1.b.vi educational resources and capacity;

These must be monitored, reviewed and evaluated systematically. When an issue is identified it must be documented and dealt with promptly;

2.1.c *pre-registration tutors evaluating trainees. To do this, tutors must have access to reliable evidence about a trainee's performance. Tutors must be competent to assess the performance of trainees;*

2.1.d *the quality and development of pre-registration tutors.*

Standard 3 – Equality, diversity and fairness

3. Initial pharmacy education and training must be based on principles of equality, diversity and fairness. It must meet the requirements of all relevant legislation.

3.1 systems and policies for capturing equality and diversity data. Concerns should be documented, addressed and disseminated;

3.2 strategies for staff training in equality and diversity

Standard 4 – Selection of students *and trainees*

4. Selection processes must be open, fair and comply with relevant legislation. Processes must ensure students *and trainees* are fit to practise at the point of selection. Selection includes recruitment and admissions.

4.1 Selection process must give applicants the information they need to make an informed application.

4.2 Selection criteria must be explicit. They should include:

4.2.a meeting academic and professional entry requirements;

4.2.b meeting English language requirements appropriate to MPharm degree study. Guidelines issued by English language testing bodies should be followed to ensure that admissions language requirements are appropriate;

4.2.c meeting numeracy requirements;

4.2.d taking account of good character checks, such as Criminal Records Bureau (CRB)/Disclosure Scotland checks;

4.2.e passing health checks (subject to reasonable adjustments being made). Health checks could include self-evaluations and/or evaluations by healthcare professionals;

4.2.f recognising prior learning, where that is appropriate

4.3 Selectors should apply selection criteria fairly. They should be trained to do this. Training should include equality and diversity matters

Standard 5 – Curriculum delivery and the student experience

5. The curriculum for MPharm degrees *and the pre-registration scheme* must deliver the outcomes in Standard 10. Most importantly, curricula must ensure students *and trainees* practise safely and effectively. To ensure this, pass criteria must describe safe and effective practice.

5.1 Curricula must be integrated.

5.2 Curricula must be progressive, dealing with issues in an increasing more complex way until the right level of understanding is reached.

5.3 An MPharm must be delivered in an environment which places study in a professional and academic context and requires students to conduct themselves professionally. *Pre-registration training must be delivered in a professional environment which requires trainees to conduct themselves professionally.*

5.4 An MPharm must be delivered in an environment informed by research. This means that whether or not all staff are engaged in research, their teaching must be informed by research.

- 5.5** An MPharm degree teaching and learning strategy must set out how students will achieve the outcomes in Standard 10. Learning opportunities must be structured to provide:
- 5.5.a** an integrated experience of relevant science and pharmacy practice;
 - 5.5.b** a balance of theory and practice;
 - 5.5.c** independent learning skills.
- 5.6** The MPharm degree curriculum must include practical experience of working with patients, carers and other healthcare professionals. Practical experience should increase year on year.
- 5.7** There must be a clear assessment strategy for the MPharm degree. Assessment methods must measure the outcomes in Standard 10.
- 5.8** The MPharm degree assessment strategy should include:
- 5.8.a** diagnostic assessments;
 - 5.8.b** formative assessments;
 - 5.8.c** summative assessments;
 - 5.8.d** timely feedback.
- 5.9** Academic regulations must be appropriate for a degree that is both academic and professional and may lead to further professional training. As a general principle, all assessments must be passed. This means that condonation, compensation, trailing, extended re-sit opportunities and other remedial measures should be extremely limited, if they are permitted at all. MPharm degree academic regulations may be more stringent than university norms. This may include higher than usual pass marks for assessments demonstrating knowledge and skills essential to safe and effective pharmacy practice.
- 5.10** Marking criteria must be used for all assessments and all pass criteria must reflect safe and effective practice.
- 5.11** Patient safety must be paramount in assessments: any evidence of an assessment demonstrating unsafe practise must result in failure.
- 5.12** A pre-registration training plan must describe how the learning outcomes for pre-registration will be delivered.
- 5.13** A pre-registration training plan must describe all assessments, including tutor evaluations and tutor sign-offs.

Standard 6 – Support and development for students *and trainees*

6. Students *and trainees* must be supported to develop as learners and professionals during their initial education and training.

6.1. A range of mechanisms must be in place to support students *and trainees* to develop as learners and professionals.

Standard 7 – Support and development for academic staff *and pre-registration tutors*

7. Anyone delivering initial education and training should be supported to develop in their professional roles.

7.1. There must be a range of mechanisms in place to support anyone delivering initial education and training to develop in their role.

7.2. Induction programmes are provided *for tutors* and university staff as appropriate. This should include induction programmes for non-pharmacists working on MPharm degrees.

7.3. Everyone involved in delivering the curriculum should have:

7.3.a effective supervision;

7.3.b an appropriate and realistic workload;

7.3.c effective personal support;

7.3.d mentoring;

7.3.e time to learn;

7.3.f continuing professional development opportunities.

7.4. *Tutors have an identified source of peer support.*

Standard 8 – Management of initial education and training

8. Initial pharmacist education and training must be planned and maintained through transparent processes which must show who is responsible for what at each stage

8.1. All education and training will be supported by a defined management plan with:

8.1.a a schedule of responsibilities

8.1.b defined structures and processes to manage the delivery of education and training

Standard 9 – Resources and capacity

9. Resources and capacity are sufficient to deliver outcomes.

9.1 There must be:

9.1.a robust and transparent mechanisms for securing an appropriate level of resource for delivering an accreditable MPharm degree;

9.1.b sufficient staff from relevant disciplines to deliver the curriculum to students *and trainees*. Staff must be appropriately qualified and experienced. The staffing profile must include:

9.1.b.i sufficient numbers of pharmacists – registrants of the GPhC – with experience of teaching in higher education to ensure that an MPharm degree can produce students equipped to enter pharmacist pre-registration training in Great Britain.

9.1.b.ii sufficient numbers of pharmacists to act as tutors and professional mentors at university *and in pre-registration*. Not all personal tutors must be pharmacists.

9.1.b.iii pharmacists who are leaders in the profession and in their university, who can influence university policy relevant to pharmacy

9.1.b.iv non-pharmacist academics who can influence school and university policy relevant to pharmacy

9.1.b.v staff who are sufficiently experienced to supervise research. It would be unusual for anyone to supervise research at a particular level unless they had researched to that level or beyond. New research supervisors must be mentored and signed off as being fit to supervise after a period of mentoring

9.1.b.vi science academics who understand the relevance of their discipline to pharmacy and deliver their area of expertise in a pharmaceutical context

9.1.b.vii academic pharmacists and other experienced MPharm degree staff who are able to act as mentors to non-pharmacist colleagues

9.1.c pre-registration tutors who meet the GPhC's standards for pre-registration tutors.

9.1.d career pathways in universities for all staff teaching on MPharm degrees, including pathways for practice staff

9.1.e clear lines of authority and responsibility for the strategic organisation and day-to-day management of placements

9.1.f training and ongoing support for all non-pharmacists involved in the delivery of MPharm degrees which must help them understand:

9.1.f.i help and understand the relevance of their work to pharmacy

9.1.f.ii how to deliver their area of expertise in a pharmaceutical context

9.1.g appropriate learning resources

9.1.h accommodation and facilities that are fit for purpose

9.1.i pre-registration premises which meet the GPhC's standards for pre-registration premises

Standard 10 - Outcomes

10.1 Expectations of a pharmacy professional

Learning outcome	MPharm	Pre-reg
10.1.a Recognise ethical dilemmas & respond in accordance with relevant codes of conduct and behaviour	Shows how	<i>Does</i>
10.1.b Recognise the duty to take action if a colleague's health, performance or conduct is putting patients or public at risk	Knows how	<i>Knows how</i>
10.1.c Recognise personal health needs, consult and follow the advice of a suitably qualified professional, and protect patients or public from any risk posed by personal health	Does	<i>Does</i>
10.1.d Apply the principles of clinical governance in practice	Knows how	<i>Does</i>
10.1.e Demonstrate how the science of pharmacy is applied in the design and development of medicines and devices	Shows how	<i>Knows how</i>
10.1.f Contribute to the education and training of other members of the team, including peer review and assessment	Shows how	<i>Does</i>
10.1.g Contribute to the development of other members of the team through coaching and feedback	Knows how	<i>Shows how</i>
10.1.h Engage in multidisciplinary team working	Knows how	<i>Does</i>
10.1.i Respond appropriately to medical emergencies, including provision of first aid	Knows how	<i>Shows how</i>

10.2 The skills required in practice

10.2.1 Implementing health policy

Learning outcome	MPharm	Pre-reg
a. Promote healthy lifestyles by facilitating access to and understanding of health promotion information	Shows how	<i>Does</i>
b. Access & critically evaluate evidence to support safe, rational & cost effective use of medicines	Shows how	<i>Knows how</i>
c. Use the evidence base to review current practice	Shows how	<i>Does</i>
d. Apply knowledge of current pharmacy-related policy to improve health outcomes	Knows how	<i>Shows how</i>
e. Collaborate with patients, the public and other healthcare professionals to improve patient outcomes	Knows how	<i>Shows how</i>
f. Play an active role with public and professional groups to promote improved health outcomes	Knows how	<i>Knows how</i>

g. Contribute to research & development activities to improve health outcomes	Knows how	<i>Knows how</i>
h. Provide evidence- based medicines information	Shows how	<i>Does</i>

10.2.2 Validating therapeutic approaches and supplies prescribed and over-the-counter medicines

Learning outcome	MPharm	<i>Pre-reg</i>
a. Identify and employ the appropriate diagnostic or physiological testing techniques in order to promote health	Knows how	<i>Shows how</i>
b. Identify inappropriate health behaviours and recommend suitable approaches to interventions	Shows how	<i>Does</i>
c. Instruct patients in the safe and effective use of their medicines and devices	Shows how	<i>Does</i>
d. Analyse prescriptions for validity and clarity	Shows how	<i>Does</i>
e. Clinically evaluate the appropriateness of prescribed medicines	Shows how	<i>Does</i>
f. Provide, monitor and modify prescribed treatment to maximise health outcomes	Shows how	<i>Does</i>
g. Communicate with patients about their prescribed treatment	Shows how	<i>Does</i>
h. Optimise treatment for individual patient needs in collaboration with the prescriber	Shows how	<i>Does</i>
i. Record, maintain and store patient data	Shows how	<i>Does</i>
j. Supply medicines safely and efficiently, consistently within legal requirements and best professional practice. NB This should be demonstrated in relation to both human and veterinary medicines.	Shows how	<i>Does</i>

10.2.3 Ensuring safe and effective systems are in place to manage risk inherent in the practice of pharmacy and the delivery of pharmaceutical services

Learning outcome	MPharm	<i>Pre-reg</i>
10.2.3.a. Ensure quality of ingredients to produce medicines and products	Knows how	<i>Shows how</i>
10.2.3.b. Apply pharmaceutical principles to the formulation, preparation and packaging of products	Shows how	<i>Shows how</i>
10.2.3.c. Verify safety and accuracy utilising pharmaceutical calculations	Does	<i>Does</i>
10.2.3.d. Develop quality management systems including maintaining appropriate records	Shows how	<i>Shows how</i>
10.2.3.e. Manage and maintain quality management systems including maintaining appropriate records	Shows how	<i>Does</i>
10.2.3.f. Procure and store medicines and other pharmaceutical products working within a quality assurance framework	Knows how	<i>Does</i>
10.2.3.g. Distribute medicines safely, legally and effectively	Knows how	<i>Does</i>

10.2.3.h.	Dispose of medicines safely, legally and effectively	Knows how	<i>Does</i>
10.2.3.i.	Manage resources in order to ensure work flow and minimise risk in the workplace	Knows how	<i>Shows how</i>
10.2.3.j.	Take personal responsibility for health and safety	Does	<i>Does</i>
10.2.3.k.	Work effectively within teams to ensure safe and effective systems are being followed	Knows how	<i>Does</i>
10.2.3.l.	Ensure the application of appropriate infection control measures	Shows how	<i>Does</i>
10.2.3.m.	Supervise others involved in service delivery	Knows how	<i>Does</i>
10.2.3.n.	Identify, report and prevent errors and unsafe practice	Shows how	<i>Does</i>
10.2.3.o.	Procure, store and dispense and supply veterinary medicines safely and legally	Knows how	<i>Knows how</i>

10.2.4 Working with patients and the public

Learning outcome	MPharm	<i>Pre-reg</i>
a. Establish and maintain patient relationships while identifying patients' desired health outcomes and priorities	Shows how	<i>Does</i>
b. Obtain and record relevant patient medical, social and family history	Shows how	<i>Does</i>
c. Identify and employ the appropriate diagnostic or physiological testing techniques to inform clinical decision making	Knows how	<i>Shows how</i>
d. Communicate information about available options in a way which promotes understanding	Shows how	<i>Does</i>
e. Support the patient in choosing an option by listening and responding to their concerns and respecting their decisions	Shows how	<i>Does</i>
f. Conclude consultation to ensure a satisfactory outcome	Shows how	<i>Does</i>
g. Maintain accurate and comprehensive consultation records	Shows how	<i>Does</i>
h. Provide accurate written or oral information appropriate to the needs of patients, the public or other healthcare professionals	Shows how	<i>Does</i>

10.2.5 Maintaining and improving professional performance

Learning outcome	MPharm	<i>Pre-reg</i>
a. Demonstrate the characteristics of a prospective professional pharmacist as set out in relevant codes of conduct and behaviour	Does	<i>Does</i>
b. Reflect on personal and professional approaches to practice	Does	<i>Does</i>
c. Create and implement a personal development plan	Does	<i>Does</i>

d. Review and reflect on evidence to monitor performance and revise professional development plan	Does	<i>Does</i>
e. Participate in audit and in implementing recommendations	Knows how	<i>Shows how</i>
f. Contribute to identifying learning and development needs of team members	Knows how	<i>Does</i>
g. Contribute to the development and support of individuals and teams	Knows how	<i>Does</i>
h. Anticipate and lead change	Knows how	<i>Shows how</i>

Indicative syllabus

A1.1 How medicines work

Therapeutics

- Routes of administration
- New therapeutic advances
- Infection control
- Complementary therapies
- Clinical therapeutic uses of drugs

Applied Physical, Chemical and Biological sciences

- Sources and purification of medicinal substances
- Physicochemical characteristics of drugs and biological systems
- Thermodynamics and chemical kinetics
- (Bio)Analytical principles and methods
- Drug design and discovery
- Cell and molecular biology
- Biochemistry
- Genetics
- Microbiology
- Immunology
- Pharmaceutical chemistry

- Drug identification
- Drug synthesis

Pharmacology, pharmacokinetics & pharmacodynamics

- Contraindications, adverse reactions and drug interactions
- ADME
- Prediction of drug properties
- Pharmacogenetics and pharmacogenomics
- Drug and substance misuse
- Clinical toxicology and drug-over-exposure
- Molecular basis of drug action
- Metabolism

Pharmaceutical technology including manufacturing & engineering science

- Biotechnology
- Manufacturing methods
- Quality assurance processes
- Sterilisation and asepsis
- Environmental control in manufacturing

Formulation and material science

- Materials used in formulations and devices
- Biopharmaceutics, developmental pharmaceutics, pre-formulation and formulation studies
- Design and standardization of medicines
- Microbiological contamination
- Contamination control
- Product stability
- Medical devices

A1.2 How people work

Normal & abnormal structure & function

- Nutrition
- Physiology
- Pathology
- Infective processes

Sociology

- Social and behavioural science

Health psychology

- Health promotion
- Disease prevention
- Behavioural medicine

Objective diagnosis

- Differential diagnosis
- Symptom recognition
- Diagnostic tests

Epidemiology

- Aetiology and epidemiology of (major) diseases

A1.3 How systems work

Healthcare management

- Public health
- Organisations: NHS, DH, govt priorities
- Other professionals

- Health care systems

Evidence-based practice

- Health information systems/ resources
- Health policy and (pharmaco)economics

Professional regulation

- Legislation
- Professional ethics and fitness to practise
- Sale and supply of medicines
- CPD
- Political and legal framework

Medicines regulation

- Evaluation and regulation of new drugs and medicines
- Pharmacopoeial specifications and biological standards
- Medicines licensing
- Product quality, safety and efficacy
- The supply chain
- Packaging, labelling and patient information

Clinical governance

- SOPs
- Research methodology / research ethics
- Risk & quality management
- Good manufacturing/dispensing practice
- Good clinical practice
- Health policy, clinical and science research methods

Clinical management

- Disease management
- Chronic medicines management

- Medicines use review
- Care planning

Workplace Regulation

- Health & Safety
- Sexual boundaries
- Independent Safeguarding Authority
- Data protection
- FOIA
- Consumer protection incl. complaints procedures

A1.4 Core and transferable skills

Professionalism

Research and research methods

Critical appraisal

- Audit and learning from errors

Problem solving

- Study skills
- Team-working skills

Clinical decision making

- Leadership skills

Accurate record keeping

Reflective practice (incl. continuing professional development)

Effective communication

- Interpersonal skills
- Medical terminology

Interpret & interrogate clinical data

Analyse & use numerical data

Pharmaceutical numeracy

Technological literacy

A1.5 Attitudes and values

See the GPhC *Code of Conduct for pharmacy students (2010)* and *Standards of conduct, ethics and performance (2010)*