Reaccreditation of a Master of Pharmacy degree course (MPharm)

University of Central Lancashire (UCLan)

Report of a reaccreditation event, 4-6 May 2016

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 University of Central Lancashire completed step 7 of the accreditation process in 2011, after admitting its first students in 2007; these students graduated in July 2011. The accreditation was undertaken against the criteria established by the Royal Pharmaceutical Society of Great Britain. On that occasion the team recommended a full-five year accreditation, the maximum allowed at that time, but imposed a condition that all module assessments were to be passed by the students in order for them to proceed to the following year; trailing a failed module could not be permitted. This condition was met. Although reaccreditation had not been due until 2016, the University had developed a new programme and wished to be reaccredited in 2015. Accordingly, a reaccreditation event was scheduled for March/April 2015 during which the new programme was considered. However, during that event, the accreditation team concluded that there were important failings in the provision at the University of Central Lancashire. In light of these concerns, the team leader and the GPhC's Quality Assurance Manager (Education) met with the then recently appointed

Head of Pharmacy, who, after consulting his senior management, agreed to withdraw from the reaccreditation process, acknowledging that the provision at the University of Central Lancashire was accredited until the end of the 2015/16 academic year. In a subsequent meeting with the Head of Pharmacy, the team emphasised the need for a detailed action plan to address the shortcomings of the proposed new MPharm programme. The main issues were raised with the Registrar and a meeting was held between the GPhC and University representatives on May 1 2015 to agree the detailed action plan. This plan included close monitoring of the UCLan MPharm degree in 2015-2016, the provision of a revised business plan and a definitive restructuring plan for pharmacy, including the structural context in which it would operate, the staffing levels, and the roles and responsibilities for managing the programme. Since March/April 2015, the restructuring of the University had been completed, with the establishment of a School of Pharmacy and Biomedical Sciences within the College of Clinical and Biomedical Sciences, alongside the School of Medicine and the School of Dentistry. Moreover, the MPharm programme had undergone complete revision. A reaccreditation event was arranged for May 2016 and the following is a report of that event.

Documentation

The provider submitted submission documentation to the GPhC in line with agreed timescales and a pre-visit took place at the University of Central. Lancashire on 14 April 2016. During the pre-visit the schedule of meetings and timings for the reaccreditation event were confirmed and the GPhC requested that three documents be submitted. These were i) a revised organogram reflecting the structure of the School of Pharmacy and Biomedical Sciences ii) a table reflecting the student/ staff ratio applicable to the MPharm only and iii) a schematic of the process to manage failing students on current course.

The event

The event began with a private meeting of the accreditation team and GPhC representatives on 4 May 2016. The remainder of the event took place on site at the University of Central Lancashire on 5-6 May 2016, and comprised a series of meetings with staff and students.

Accreditation team

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

Name	Designation at the time of accreditation event
Mr Peter Curphey*	Accreditation team leader, Pharmacy Consultant
Professor Andrew Husband	Accreditation team member (Academic), Professor of Pharmacy Education , Durham University
Professor Brenda Costall	Accreditation team member (Academic), Professor of Neuropharmacology, former Pro-Vice Chancellor, Deputy Vice Chancellor and Head of Pharmacy, University of Bradford
Miss Raminder Sihota	Accreditation team member (Pharmacist), Senior Manager and Professional Development, Boots UK
Mrs Gail Fleming	Accreditation team member (Pharmacist), Head of Pharmacy, Health Education Kent Surrey, Sussex
Mr Scott Downham**	Accreditation team member (Newly Qualified Pharmacist), Clinical Pharmacist (Team Member - Lay Member), Chief Executive, Association for Nutrition

Ms Leonie Milliner

along with:

Name	Designation at the time of visit
Ms Joanne Martin *	Quality Assurance Manager (Education), General Pharmaceutical Council
Professor Brian Furman	Rapporteur, Emeritus professor of pharmacology, University of Strathclyde

*attended pre-visit meeting on 14 April 2016

**submitted questions but was unable to attend the event

Declaration of potential conflicts of interest

Miss Raminder Sihota works in the same department of Boots UK as Jennie Watson, an externally funded clinical tutor at UCLan.

The the considered that this did not reflect a potential conflicts of interest were declared.

No potential conflicts of interest were declared.

Meeting the accreditation standards (see Appendix 1)

	Accreditation team's commentary
Standard 1 – Patient and public safety There must be clear procedures to address concerns about patient safety arising from initial pharmacy education and training. Concerns must be addressed immediately.	The systems in place to ensure patient and public safety include early introduction of students to the concepts of professionalism, 'fitness to practise' (FTP), patient safety, and the GPhC Code of Conduct for Pharmacy Students; these are repeatedly reinforced throughout the programme. When students meet patients, issues around privacy and confidentiality are stressed. All students undergo a Disclosure and Barring Service (DBS) check. Prior to undertaking placements, students must comply with relevant health requirements and must self-report any health or conduct issues. Students are briefed before placements, during which they are supervised and monitored. Throughout, students are made aware of the need to understand their own limitations and that they should only undertake tasks for which they have the necessary skills or training. There are well-established fitness to practise procedures at various levels in the University. **The team was satisfied that all of the criteria to meet this standard will be met.**
Standard 2 – Monitoring, review and evaluation of initial education	Major changes to the University structure had taken place since 2015. The University is now organised into five colleges, with the School of Pharmacy and Biomedical Sciences lying within the College of Clinical and Biomedical Sciences, alongside the

and training The quality of pharmacy education and training must be monitored, reviewed and evaluated in a systematic way.	School of Medicine and the School of Dentistry. The School of Pharmacy and Biomedical Sciences is managed by the Senior Executive Team (SET), and is autonomous, with all decisions regarding management being School-based. Quality assurance of the MPharm programme is undertaken through an annual monitoring report, which is submitted to the College's and University's Academic Standards and Quality Assurance committees after approval at School level; this includes reports from module leaders and external examiners, minutes of the Staff Student Liaison Committee, student feedback, patient feedback (where available), placement feedback (from both students and providers), assessment board data, NSS data and analysis of course performance. Courses also undergo periodic review every five years. Quality assurance of placements is undertaken through evaluations undertaken by both students and placement providers to ensure that the student experience meets the placement learning outcomes; a placement provider feedback meeting is used to gain feedback from the providers. The School liaises with the host organisations to ensure that they know the learning outcomes and to choose the supervisors. There are workbooks for each placement; all students and providers have a copy of this workbook, which describes the learning outcomes with which placement providers are therefore familiar. There are briefing sessions before each placement; these address the learning outcomes and other aspects, including professional behaviour, dress codes, health and safety issues, and risk assessments. A placement coordinator, supported by a designated placement administrator, liaises between the placement providers and the School Executive Team. All placements are undertaken under the supervision of a pharmacist who is a member of the pharmacy team. The School works with its Advisory Board to consider the appropriateness of placements, looking at both the actual place, as well as at the provider. The team acknowledged the progress made in the last year, and was now confident that all of the criteria to meet this standard will be met. However, as a continuation of the action plan agreed between the University and the GPhC in 2015, the team imposed a condition that the School must continue to submit an annual report to the GPhC that charts progress against the stated admissions strategy; this is in accord with pre-requisite 2.7. **The team was satisfied that all of the criteria to meet this standard will be met.**
Standard 3 – Equality, diversity and opportunity Initial pharmacy education and training must be based on principles of equality, diversity and fairness. It must meet the requirements of all relevant legislation.	The governance of equality and diversity is led at executive level, with Pro-Vice Chancellors chairing the Staff Equality & Diversity Advisory Group (SEDAG), the Equality & Diversity Executive Group (EDEG) and the Student Experience Committee (SEC). SEDAG, reporting directly to the EDEG, has the primary function to provide guidance and establish good governance practice regarding the provision of data on both staff and students. An equality analysis is systematically produced for every school and service, and equality and diversity data on staff and students are made available to all members of staff. A School of Pharmacy and Biomedical Sciences Equality and Diversity Committee advises the Head of School on all relevant matters. There is mandatory online training of members of staff in equality and diversity and all pharmacy students are also now required to undertake this training. The University was cognisant of cultural issues and sensitivities, and students learn how to deal with different religions, cultures and backgrounds; they meet and talk to a broad spectrum of individuals, including drug users, homeless people, and members of the travelling community and discuss various equality and diversity issues in

	various settings.
	The team was satisfied that both criteria to meet this standard will be met.
Standard 4 – Selection of students and trainees 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.	Information related to the course is available to applicants on the UCLan website and applicants are encouraged to visit the University on one of its open days. All offers of a place on the course are subject to satisfactory interview and this is made clear on the website, which also provides information about fitness to practise. All applications are filtered centrally to ensure that the applicants either have, or are studying for, the appropriate qualifications; if members of the central admissions staff have any doubts, the applications are referred to the School. Those applicants meeting the requirements are then interviewed and undertake a test covering mathematics, numeracy and comprehension. **The team was satisfied that all of the criteria to meet this standard will be met.**
Standard 5 – Curriculum delivery 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 practice safely and effectively.	The MPharm curriculum has been completely re-designed and remodelled, with the first students on the new course starting in September 2016. The first year of the programme, which is a foundation year, comprises three modules, each of 40 credits; this is followed by single 120 credit module in each of years 2, 3, and 4 with a progressive increase in the degree of integration in successive years. After the first year, the course is integrated through body systems-based teaching in years 2 and 3, while year 4 uses a more holistic and real-world approach to patient management, but with a focus on those people with complex healthcare needs, which often involve multiple body systems. Integration will be further ensured by developing a UCLan medicine formulary that draws on the most commonly prescribed medicines in practice, as well as those medicines associated with substantial risk. This formulary will be used by all members of staff in the planning of teaching to ensure consistency of approach and to allow students to see relevance and context from the different disciplines when considering decision-making around patient care. A 'core condition list' has also been developed to facilitate integration. A variety of teaching methods is employed throughout to ensure that students will graduate achieving the outcomes stipulated in standard 10. While year 1 will rely predominantly on lectures, seminars and practical classes, years 2-4 will make extensive use of 'case-based' learning activities, flipped classrooms, and enquiry-based learning, allowing the blurring of disciplines and permitting science and practice concepts to be considered alongside one another; the students will develop progressively as independent learners. Multiple opportunities to gain practical experience of working with patients, carers and other healthcare professionals are provided in the programme. These include placements in hospitals and community pharmacy, meeting a wide variety of expert patients through the University's well established COMENSUS group, and inter-professional educational (IPE) activities with students of other healthcare professions, including medicine, nursing and dentistry; IPE enables the students to learn about the roles of different healthcare professionals, as well as how to work and communicate effectively with them. Modules have been developed through integrated teams comprising of staff members drawn from different disciplines. Patient safety is a major focus, with professionalism being emphasised throughout the programme.

	Competency assessments are designed to ensure that students can practise effectively and safely. If students make errors that in real life would have resulted in patient harm, they will fail the assessment. **The team was satisfied that all of the criteria to meet this standard will be met.**
Standard 6 – Support and development for students and trainees Students and trainees must be supported to develop as learners and professionals during their initial education and training.	Many University and School-level mechanisms are available to support students. Upon enrolment, each new undergraduate student is assigned a member of academic staff as an academic adviser for the entire four years of the programme; although their role is primarily academic, the advisers can also signpost students to various specialist services for complex academic/pastoral/welfare issues. Regular student contact with their academic advisers is required by the University, with students meeting advisers on a minimum of six occasions during year 1 and having a minimum of two meetings in all subsequent years. Students' professional development forms part of the purpose of the meetings, which may be used to identify needs and strategies to acquire skills, develop reflective processes and aid in portfolio construction. There is also an MPharm 'buddy system', which is student-led and allows students from years 2-4 to support first year students in their transition into University life. **The team was satisfied that the one criterion to meet this standard will be met.**
Standard 7 – Support and development for academic staff and pre-registration tutors Anyone delivering initial education and training should be supported to develop in their professional roles.	Support and training is available for all members of staff. These include induction and compulsory training sessions and tutorials set up by the University for all new academic staff members, who must undertake the HEA-recognised University's Teaching Toolkit course, unless they already have relevant experience and qualifications; this course provides an introduction to the academic teaching environment, including learning, curriculum delivery, assessment, feedback, micro-teaching, student engagement, voice coaching, and reflection. The Staff Development Unit provides training activities that help staff support the learning of students with special needs or other requirements. There are formal and informal mechanisms for identifying the support and development needs of staff members, including the interim and annual appraisal system. The management of the School, through its four thematic areas (Pharmacy Practice, Pharmacology/Physiology, Chemistry/Pharmaceutics and Biosciences) allows support via the professorial lead and the principal lecturer in each theme. There is a formal annual appraisal process for all members of staff. The University offers a comprehensive portfolio of workshops, courses and events and all staff members are expected to engage in CPD and/or present work at national and international meetings. **The team was satisfied that all of the criteria to meet this standard will be met.**
Standard 8 – Management of initial education and training	The Head of School is responsible for the academic standard of the MPharm and the quality of the student learning experience; the Head of School chairs the School Executive Team. The day-to-day running of the programme is overseen by the MPharm Course Management Team, comprising the Joint Course Leaders, with input from others, including the Module

	Leads and Year Tutors. The academic development of the course is overseen by the Teaching, Learning and Curriculum Committee, while all examination papers and in-year assessments are addressed by the Assessment Committee**.** There are professorial thematic leads for Pharmacy Practice, Pharmacology/Physiology, Chemistry/Pharmaceutics and Biosciences who ensure that teaching is informed by research. Placement activity is planned and co-ordinated by the Placement Administrator and the Placement Coordinator. There is also a School IPE lead who liaises with the College IPE coordinator.
Education and training must be planned and maintained through transparent processes which must show who is responsible for what at each stage	**The team was satisfied that both criteria to meet this standard will be met.**
Standard 9- Resources and capacity Resources and capacity are sufficient to deliver outcomes.	There are mechanisms at School, College and University levels for securing appropriate levels of resource for the MPharm programme. Income is predominantly dependent on student numbers and the team received assurance from the Vice-Chancellor that any shortfall in student recruitment would not impact on capital expenditure and the University's ambitious campus master-plan, which come from different sources. Colleges have autonomy for their own budgets and there is a high demand for places on the MPharm programme. The School offers other courses such as Biomedical Sciences, with currently 90 students, and the BSc in Healthcare Science (accredited by IBMS, HEE and the HCPC), the numbers of students on which could be increased if pharmacy numbers were to decrease; the School as a business unit is not overly reliant on one provision and the College has a cash surplus which provides a buffer, and the Executive Dean can expand some courses as others decline. The Vice-Chancellor emphasised that Pharmacy is in a good position and that the University strongly supports the School. Evidence was presented that the number, qualifications and experience of staff members is sufficient to deliver the curriculum and supervise research, and that there are sufficient pharmacists, including those who are leaders in their profession and in the University with the ability to influence University policy relevant to pharmacy. Three professors have been appointed since April 2015, and a fourth will join the School in September 2016. Two members of staff have been promoted from senior lecturer to principal lecturer, one principal lecturer joined the School from another college, and another principal lecturer will be appointed from June 2016. The team was told that the School is seeking to appoint a further four principal lecturer posts. The lecture theatres, laboratory facilities and other accommodation available for delivery of the MPharm were all considered to be fit for purpose and a new Medical Clinical Skills Laboratory will be operational by September 2016; this will be used by pharmacy students for inter-professional education. It was emphasised that as the campus develops, priority will be given to the College of Clinical and Biomedical Sciences. **The team was satisfied that all of the criteria to meet this standard will be met.**
Standard 10 - Outcomes	The team scrutinised the learning outcomes by discussions with the teaching staff in two parallel subgroup sessions exploring integration and outcomes. Ten of the 58 learning outcomes (Appendix 1) were selected for detailed discussion, these being 10.1.d, 10.1.e, 10.2.1.h, 10.2.2.c, 10.2.2.g, 10.2.3.b, 10.2.3.c, 10.2.4.b, 10.2.5.c, and 10.2.5.g; the selected outcomes were

	revealed to the University staff during meeting 11. For each of the ten outcomes scrutinised in detail, the evidence provided by the discussions with the staff, along with other evidence provided with 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. **The team was satisfied that this standard will be met.**
Indicative Syllabus	The team was content with the School's use of the Indicative Syllabus to inform its curriculum. 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.

Summary and conclusions

The accreditation team agreed to recommend to the Registrar of the General Pharmaceutical Council that the University of Central Lancashire should be reaccredited to provide an MPharm degree for a further period of six years, with an interim event to take place in three years. There were no recommendations. The team acknowledged the progress made in the last year. However, as a continuation of the action plan agreed between the University and the GPhC in 2015, the team imposed a condition that the School must continue to submit an annual report to the GPhC that charts progress against the stated admissions strategy; this is in accord with pre-requisite 2.7 in meeting standard 2.

The full record and report includes other comments from the team and the Registrar regards the record and report in its entirety as the formal view on provision. Providers are required to take all comments into account as part of the accreditation process.

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:

(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 in not a guarantee of a placement for a pre-registration year or of future employment as a pharmacist.

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

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 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;

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

4. **Selection processes must be open, fair and comply with relevant legislation. Processes must ensure students 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 must deliver the outcomes in Standard 10. Most importantly, curricula must ensure students 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..

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

6. Students 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 to develop as learners and professionals.

Standard 7 – Support and development for academic staff

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.

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

  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

Standard 10 - Outcomes

10.1   Expectations of a pharmacy professional

Learning outcome	MPharm
10.1.a Recognise ethical dilemmas & respond in accordance with relevant codes of conduct and behaviour	**Shows how**
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**
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**
10.1.d Apply the principles of clinical governance in practice	**Knows how**
10.1.e Demonstrate how the science of pharmacy is applied in the design and development of medicines and devices	**Shows how**
10.1.f Contribute to the education and training of other members of the team, including peer review and assessment	**Shows how**
10.1.g Contribute to the development of other members of the team through coaching and feedback	**Knows how**
10.1.h Engage in multidisciplinary team working	**Knows how**
10.1.i Respond appropriately to medical emergencies, including provision of first aid	**Knows how**

10.2   The skills required in practice

10.2.1   Implementing health policy

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

g. Contribute to research & development activities to improve health outcomes	**Knows how**	
h. Provide evidence- based medicines information	**Shows how**	

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

Learning outcome	MPharm
a. Identify and employ the appropriate diagnostic or physiological testing techniques in order to promote health	**Knows how**
b. Identify inappropriate health behaviours and recommend suitable approaches to interventions	**Shows how**
c. Instruct patients in the safe and effective use of their medicines and devices	**Shows how**
d. Analyse prescriptions for validity and clarity	**Shows how**
e. Clinically evaluate the appropriateness of prescribed medicines	**Shows how**
f. Provide, monitor and modify prescribed treatment to maximise health outcomes	**Shows how**
g. Communicate with patients about their prescribed treatment	**Shows how**
h. Optimise treatment for individual patient needs in collaboration with the prescriber	**Shows how**
i. Record, maintain and store patient data	**Shows how**
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**

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

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

10.2.4 Working with patients and the public

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

10.2.5 Maintaining and improving professional performance

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

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

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)

Following the above reaccreditation event, the Registrar of the General Pharmaceutical Council agreed with the accreditation team's recommendation and approved the MPharm degree at the University of Central Lancashire to be reaccredited for a further period of six years. Reaccreditation will take place in six academic years' time; with an interim visit in three academic years' time (2018-19).