

Reaccreditation of a Master of Pharmacy degree course (MPharm)

Cardiff University

Report of a reaccreditation event, 22-24 April 2015

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 programme at Cardiff University is delivered by the School of Pharmacy and Pharmaceutical Sciences, founded as the Welsh School of Pharmacy in 1919. The School is one of eight constituting the College of Biomedical and Life Sciences, one of three colleges making up the University. Towards the end of academic year 2009-10, the School was visited by an accreditation team from the Royal Pharmaceutical Society of Great Britain (RPSGB), the regulator at that time. On that occasion, the MPharm programme was reaccredited for the full period of five years. Reaccreditation was subject to two conditions and came with two recommendations. The conditions were:

- i) The University was required to remove the facility to retrospectively recognise student work experience. This condition was to be implemented with immediate effect.
- ii) The School was required to review all bespoke marking schemes to ensure consistency and quality. The outcome of this review was to be submitted to the Society for approval by 31 August 2010.

Following furnishing by the School of documentation to address the two conditions, the accreditation team was satisfied that both conditions had been met.

The two recommendations from the reaccreditation visit in May 2010 were as follows:

- i) The Head of School should investigate the feasibility of the removal of the generic marking scheme from the student handbook.
- ii) The University Pharmacy team should redouble its efforts to ensure that the obvious potential for inter-professional learning (IPL) be realised.

The generic marking scheme was removed from the programme handbook and other School documents for academic year 2010-11 and has not been used since. The School increased its efforts to achieve inter-professional education (IPE). There have been evolutionary curriculum changes in the years since 2010, which have been notified to the GPhC.

A reaccreditation event was subsequently scheduled for April 2015; the outcome of that event is detailed within this report.

Documentation

The provider submitted submission documentation to the GPhC in line with agreed timescales and a pre-visit took place at Cardiff University on 23 March 2015. During the pre-visit the schedule of meetings and timings for the reaccreditation event were confirmed and the GPhC requested that a number of documents be submitted ready for the event.

The event

The event began with a private meeting of the accreditation team and GPhC representatives on 22 April 2015. The remainder of the event took place on site at Cardiff University on 23-24 April 2015, and 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
Professor Terry Healey	(Team leader) Emeritus Professor of Pharmacy, Robert Gordon University
Dr Adam Todd	(Team member - Academic) MPharm programme Director, Durham University
Professor Paul Gard	(Team member - Academic) Interim Head of School of Pharmacy, University of Brighton
Professor Brenda Costall	(Team member - Academic) Professor of Neuropharmacology and former Head of School of Pharmacy, University of Bradford
Mr Ian Smith	(Team member - Pharmacist) Lecturer in Pharmacy Practice, Keele University

Mrs Barbara Wensworth	(Team member - Pharmacist) Previous hospital Pharmacist; Freelance Consultant Pharmacist; Lecturer; External Verifier; assessor and writer
Mr Shahzad Ahmad	(Team member Pharmacist recently registered) Pharmacy Manager, Lloyds Pharmacy
Professor Dorothy Whittington	(Team member - Lay member) Emeritus Professor of Health Psychology University of Ulster, and Non-executive Director, Northern Health and Social Care Trust (Northern Ireland)

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
Mr Darren Hughes	(Observer) Director for Wales, General Pharmaceutical Council
Mrs Emma Walker	(Observer) VQ Training Specialist London Pharmacy Education and Training

*attended pre-visit meeting on 23 March 2015

Declaration of potential conflicts of interest

Mr Ian Smith had previously managed the School's Boots Teacher Practitioner. The team agreed that this did not represent 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 School has established fitness to practise (FtP) policy and procedures, and the documentation described the procedures applied to prospective students for establishing their health and immune status, and for addressing problems that may occur subsequently during the course. The procedures for addressing behaviour issues were also described, including the requirements for students to undergo Disclosure and Barring Service (DBS) checks. Students are required to make an annual self-declaration of their past and current conduct, as well as of their health status, and are aware of the consequences of non-disclosure, for example, of convictions. In advance of practice placements, students are given detailed instructions, including the requirement to abide by the GPhC Code of Conduct for Pharmacy Students and to follow all relevant local policies and procedures. They are told that they must be mindful of their limitations and only undertake tasks for which they have the necessary skills or training. Students are aware that they must not provide information or advice to patients, members of the public or healthcare staff without the explicit approval of an appropriate person, such as the Responsible Pharmacist, and then only under direct supervision. The School has procedures for raising concerns about a student's ability</p>

	<p>to practise safely, as well as how these concerns would be addressed by the School; such concerns may be raised by members of staff, supervising pharmacists, other health care practitioners or fellow students.</p> <p>The team was satisfied that this standard was 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 School has processes for monitoring, reviewing and evaluating the quality of teaching, learning and assessment, as well as the quality of placements and the educational resources and capacity. The quality of teaching, learning and assessment is monitored through an Annual Review and Enhancement process; this includes scrutiny of information on applications for entry, student progress, leaver destinations, external examiners' reports, module reviews, the National Student Survey (NSS) and the School's graduates' success in the GPhC registration assessment. Module reviews include student feedback on the content, delivery and assessment of the module. There are periodic reviews of the School no less frequently than every five years; these are undertaken by a University team, the membership of which includes external assessors; the last periodic review of the School, was in the academic year 2013/14. The quality of hospital placements is governed by local level agreements (LLAs) with University Health Boards in Wales; these LLAs cover various aspects, including supervision, mentorship and assessment of practice learning, facilities within the placement, preparation and induction of students, and involvement of the placement provider in the review and quality assurance of placements. For community pharmacy and other placements, there are documents in place to codify arrangements and there is extensive engagement with stakeholders for assuring the quality of community pharmacy placements. Teacher-practitioners from the large pharmacy multiples are involved in the selection of appropriate premises. In the case of independent pharmacies, the School works with WCPPE through local facilitators, especially in northern and western Wales. There is a University-level framework to cover placements; this includes provision of indemnity cover and risk assessments. An important aspect of quality assurance is the feedback that the School obtains from students and supervising pharmacists after each placement.</p> <p>The team was satisfied that this standard was 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>The University and the School has systems for monitoring and analysing information on the characteristics of the student population with regard to gender, disability, age, ethnicity and postcode (as an indicator of social deprivation) and these analyses are formally considered by the School's Equality and Diversity Committee. Appropriate adjustments and allowances are made to accommodate the needs of students with disabilities. All members of staff undergo equality and diversity training, and placement providers are briefed on equality and diversity issues. Equality and diversity are embedded throughout the four years of the degree programme; this includes student training in equality and diversity and the inclusion of various aspects in the programme, where legal and other aspects are discussed in the appropriate modules. In 2013, the School was successful in acquiring the Athena SWAN Silver award, which was achieved without going through the Bronze award stage.</p> <p>The team was satisfied that this standard was 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 academic entry requirements and selection processes, which cover special requirements such as fitness to practise issues, are made known to potential applicants in a number of ways, including via the MPharm programme prospectus. All suitable applicants are normally interviewed, with those based outside the UK being interviewed by telephone or Skype. The face-to-face interviews include a numeracy diagnostic assessment but failure in this is not used in isolation as the basis for rejecting an applicant. The interview is used to assess applicants’ knowledge of the science and practice of pharmacy, as evidenced by background reading or work experience, and includes a number of value-based recruitment-type questions; these assess applicants’ awareness or reflections on matters such as medical ethics, ensuring patient safety and dignity, NHS whistleblowing, and dealing with misusers of legal or illegal drugs. The University’s wider participation commitment includes ‘contextual admissions’, whereby students falling into certain categories are automatically interviewed and may be given special consideration if they narrowly miss their entry offer; the students considered in this way are those identified as having particular socio-economic disadvantages, and who come from low-participation neighbourhoods, as identified by postcodes, or are those applicants who have spent time in care-homes. Applicants’ fitness to practise is assessed through health declarations, which are scrutinised by the University’s Occupational Health Services, as well as through self-declarations relating to criminal convictions; all students undergo Disclosure and Barring Service (DBS) checks.</p> <p>The team was satisfied that this standard was 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 MPharm programme is delivered in three phases (year 1; years 2 and 3; and year 4). Year 1, primarily concerned with the healthy individual and self-care, is the foundation year, introducing students to basic clinical and scientific skills and knowledge, as well as introducing the requisite attitudes and behaviours of an aspiring healthcare professional. Years 2 and 3 build on year 1, with year 2 having as its focal point body systems and their diseases (cardiovascular, respiratory, gastrointestinal, urinary, endocrine and immune), and year 3 focusing on complex disease states (neurodegenerative and psychiatric diseases, pain, infection and cancer). Year 4 emphasises clinical problem solving in preparation for pre-registration training. The pharmaceutical sciences are developed with clinical elements in an integrated way, continuing the progressive integration towards a holistic view of pharmacy and healthcare. Year 4 is ultimately concerned with research activity, prescribing decisions, and individualised pharmaceutical care in patients presenting with multiple and disparate co-morbidities. The integration and contextualisation of science and practice are achieved through a variety of mechanisms that foster both horizontal and vertical integration in the curriculum. Early exposure to patients and the public, embedded inter-professional activities and emphasis on the development of consultation and decision making skills, all supported by relevant underpinning science, provide students with a framework to solve complex patient and societal health problems where information is often incomplete. The intended learning outcomes at both the programme and module level require students to demonstrate knowledge, understanding, application and competence across a range of domains. Placements, which are undertaken in both traditional arenas (hospital and community pharmacy), as well as in non-traditional environments (for example, working with the Red Cross, with Kaleidoscope on alcohol counselling, with Crossroads, which is a charity for carers, and with a dementia group), are a consistent and repeated feature of the programme and are designed to contextualise</p>

	<p>learning. Students also meet expert patients with conditions such as diabetes and Parkinson’s disease. Inter-professional learning, focussed around the themes of clinical skills and the patient journey, are embedded in each year and integrated with the taught curriculum to foster quality multidisciplinary healthcare provision. These activities are primarily undertaken with medical students, but there are also activities with students of other healthcare professions, such as optometry. Diagnostic, formative and summative assessments are used throughout the programme. Formative assessments are used extensively in preparation for those summative assessments that are principally concerned with patient facing activities (for example, dispensing tests, OSCEs, clinical skills assessments, numeracy tests). Professional competency assessments are marked as pass/fail and must be passed to enable a student to progress/graduate. Assessments are designed to ensure that students meet pass criteria in order to reflect safe practice and thus protect patients and the public. If students make mistakes in an assessment that in practice would lead to patient harm, they will fail that assessment, in accord with the School’s ‘critical error’ policy. The School uses a ‘yellow flag’ system as a feedback tool in formative assessments, where patient safety issues are identified and flagged up to students, in order to encourage them to reflect on their understanding, tailor their future revision and rectify poor performance.</p> <p>The team was satisfied that this standard was 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>There is a personal tutor system, whereby on arrival in the School, every student is allocated a personal tutor who provides pastoral support for the duration of the student’s time in the University; each student also has a deputy-personal tutor who can look after the student in the absence of the tutor. Tutors support students academically, as well as pastorally, and can signpost students to the numerous support systems available centrally through the University. Personal tutors are very accessible and students know that there is always somebody upon whom they can rely; if they wish, they can also discuss matters with any other member of staff. There is also a University Student Mentor Scheme, whereby a first year student will not only have two academic members of staff as tutors but will also have a student mentor.</p> <p>The team was satisfied that this standard was met.</p>
<p>Standard 7 – Support and development for academic staff and pre-registration tutors</p> <p>Anyone delivering initial education and training should be supported to develop in their professional roles.</p>	<p>All new member of staff are subject to a probationary period, typically three years. During this period, probationary academic staff members are required to choose an independent mentor, in addition to the Head of School or Deputy Head of School as their line manager. Reviews of the probationer’s performance against the agreed objectives and role expectations take place at 12 and 24 months. The normal expectation is that probationers will complete the University’s Postgraduate Certificate in University Teaching and Learning (PgCUTL), while being engaged in teaching, supporting learning and conducting assessments. Local and University-wide induction processes are in place for all new members of staff and there are mechanisms for ensuring the appropriate induction of non-pharmacist members of staff and their orientation towards the profession. There is a staff appraisal system, which uses a holistic approach, and which is a vehicle for assessing staff</p>

	<p>workload; during appraisal, members of staff are asked about the manageability of their workloads. The appraisal also addresses education, research and scholarship, as well as wider engagement. In considering their workload, the School is amenable to creating space for colleagues, for example, to devote more time to research or to any activity that helps their development, including participation in teaching and learning seminars, or attendance at conferences or leadership courses. Staff career advancement and promotion are also considered at appraisal, with promotion considered on the basis of excellence in teaching, research and other forms of scholarship, or wider engagement. The University has a comprehensive training and development programme and all staff are encouraged to attend courses to support their job role and personal development. The School's Learning, Teaching and Assessment Committee arranges discussion groups/seminars on various topics including, for example problem-based learning, curriculum design, flipping the classroom, and the use of integrated case studies in the MPharm.</p> <p>The team was satisfied that this standard was met.</p>
<p>Standard 8 – Management of initial education and training</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>The Head of School, who is responsible and accountable to the Pro-Vice Chancellor of the College for the School's activities, directs the School along with an Executive Group; this group also includes the Deputy Head of School and the Directors of Education and of Research and Engagement and the School Manager. The School Undergraduate Board of Studies, which reports to the School Board has ownership of the MPharm curriculum, including its syllabus, how it is taught, how it is assessed and how it is developed; its membership includes all members of staff engaged in teaching the MPharm, along with student representatives. There is an MPharm Programme Director who operates along with members of staff with specific roles and responsibilities concerned with, for example, admissions, the personal tutor system, and placements. There are year leaders, who are concerned with drawing up timetables for assessments and feedback, and for reviewing draft assessments and their associated marking schemes. Learning within the modules is the responsibility of the module leaders.</p> <p>The team was satisfied that this standard was met.</p>
<p>Standard 9- Resources and capacity</p> <p>Resources and capacity are sufficient to deliver outcomes.</p>	<p>The School operates its own annual budget, with an annual round of budget planning for the coming year and forward-projections for the next three years for all of the School's activities. School budgetary control is exercised primarily by the Head of School, with regular reviews of progress against budgets; the School is subject to quarterly performance review meetings with the College. Budgets for the present academic year, and for the next three years predicted operating surpluses in each year. The MPharm student/staff ratio is currently around 12:1, with an intake of 115 home/EU students in 2014/15 and a total academic and teacher-practitioner staff of 49 (38.1 FTE). The staffing within the School spans the traditional areas of chemistry, drug delivery, pharmacology and pharmacy practice, and 24 members of the teaching staff are pharmacists, with a further five members having been previously pharmacy-qualified; all members of the School's Executive Group were themselves educated and trained as pharmacists. All regular members of the academic staff are holders of relevant PhDs and all post-probationary members of the academic staff are experienced teachers in higher education. The library IT and other</p>

	<p>learning resources available to MPharm students were described in the documentation. The nearby, multidisciplinary Bute Library supports all subjects, and has a large book and print collection, as well as many online resources, including e-books, e-journals, and data bases. There is an 'Academic and Skills Development Centre' that supports students, and information literacy is integrated into the School, being embedded in teaching, assessment and course development, with a bank of online resources for teaching information literacy. Staff members and students use the VLE 'Learning Central', a central repository through which members of staff have access to all modules and on which the staff places material including lectures, slides and notes. The School is housed in the dedicated Redwood Building, which has undergone extensive refurbishment, and also has access to the Medical School Clinical Skills and Simulation unit for the delivery of inter-professional education to pharmacy and medical students. Further refurbishment of a teaching and research chemistry laboratory will be undertaken before October 2015.</p> <p>The team was satisfied that this standard was met.</p>
<p>Standard 10 - Outcomes</p>	<p>The team scrutinised the standard 10 learning outcomes to determine their delivery and assessment by discussions with the teaching staff in two parallel sessions. Rather than examining each of the 58 outcomes in these sessions, eight outcomes were selected for detailed discussion. The Cardiff University staff members were unaware of the outcomes to be discussed before the meeting. The outcomes chosen were 10.1.d, 10.1.1.a, 10.2.1.a, 10.2.2.c, 10.2.1.e, 10.2.5.a 10.2.5.d, and 10.2.5.h (see appendix 1). Additional outcomes were covered in discussions addressing the various standards 1-9 and by the team's scrutiny of the documentation. For each of the eight 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 14% 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. Thus, the team was satisfied that standard 10 is met.</p> <p>The team was satisfied that this standard was 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 team agreed to recommend to the Registrar of the General Pharmaceutical Council that the MPharm degree delivered at Cardiff University, should be reaccredited for a full period of 6 years with a 3 year interim visit. There were no conditions or recommendations.

The team recognised the effective leadership within the School, the collegiate nature of the staff team and the shared enthusiasm and commitment to the development and delivery of the MPharm degree.

The full record includes other comments from the team and the Registrar regards the record and report in their 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:

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 Cardiff University MPharm degree for reaccreditation a further period of six years. Reaccreditation will take place in six academic year' time; with an interim visit in three academic years' time (2017/18)

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	<i>Pre-reg</i>
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	<i>Pre-reg</i>
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>
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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 pharmaceuticals, 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)*