Reaccreditation of a Master of Pharmacy degree course (MPharm), delivered in Great Britain, and MPharm 2+2 provision delivered in-part overseas

University of Strathclyde (in collaboration with International Medical University, Malaysia)

Report of a reaccreditation event, 14-16 February 2012

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 contained in the Pharmacy Order 2010. This 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.

The General Pharmaceutical Council permits providers of fully accredited MPharm degrees to apply for accreditation to deliver a maximum of the first two years of their MPharm at a partner institution overseas (known as a 2+2 MPharm). Students who successfully complete years 1 and 2 of an accredited 2+2 MPharm are permitted to study years 3 and 4 of the MPharm at the partnered GB University and are then eligible, upon graduation, to enter pre-registration training in the UK.

This accreditation 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’.

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General Pharmaceutical Council, MPharm reaccreditation report (UK and 2+2 overseas provision)
University of Strathclyde (in collaboration with IMU, Malaysia), 15-16 February 2012
Background

MPharm provision delivered in Great Britain:

The University of Strathclyde is based in Glasgow, and has offered pharmacy courses since receiving University its Royal Charter in 1964. The current MPharm degree is managed and delivered by the Strathclyde Institute of Pharmacy and Biomedical Sciences (SIPBS), which is part of the Faculty of Science, one of the university’s four faculties. The University of Strathclyde has received five-yearly reaccreditation visits since the early 1990s; the most recent of which took place in January 2006. Reaccreditation in 2006 was subject to meeting five conditions, which were each satisfactorily addressed following the event.

MPharm 2+2 overseas provision:

The University of Strathclyde was accredited in 2008 to offer the first two years of its accredited MPharm degree in Kuala Lumpur, Malaysia, as a collaborative venture with the International Medical University (IMU). During a follow-up visit in 2009 to check the effectiveness of the induction process, the accreditation team leader and accreditation manager visited the University of Strathclyde’s Glasgow site and met with students who had transferred from IMU to year 3 of the GB provision. The team was reassured to hear from students that the transfer had been smooth and that they had settled into the UK course and been well supported by University staff.

Reaccreditation of GB and overseas MPharm provision:

Following initial accreditation, the reaccreditation of 2+2 MPharm degrees must fall in line with the reaccreditation of the partnered GB course. The GPhC’s usual process for reaccreditation involves a full reaccreditation visit to both GB and overseas sites. As the University of Strathclyde’s 2+2 course had achieved accreditation in 2008 following a full overseas visit, which was followed up by a UK meeting with the overseas students in 2009, it was agreed that it would be disproportionate to revisit the Malaysian site as part of the reaccreditation process in 2012. It was agreed that the reaccreditation process would instead involve a visit to the University of Strathclyde only, but that provision at both sites would be reviewed and that the evidence submitted to the GPhC would need to address provision at both institutes (GB and Malaysia). A reaccreditation event was subsequently scheduled for February 2012 to review both the GB MPharm, and the 2+2 MPharm delivered in collaboration with IMU, Malaysia. This report includes the outcome of the reaccreditation event.

Documentation

The provider submitted documentation to the GPhC in line with agreed timescales. The documentation was reviewed by the Team Leader and Quality Assurance Manager and a pre-visit meeting took place at the Strathclyde Institute of Biomedical Sciences, University of Strathclyde, on 13 January 2012. During that meeting the University updated the team on developments since the last reaccreditation visit and detailed how it had addressed the conditions and recommendations set at the 2006 reaccreditation event and 2008 checking visit. The University was advised how the reaccreditation visit would be structured, and the schedule of meetings and timings for the reaccreditation event were confirmed. The University agreed to provide a number of additional documents on the day of the event.
The event

The event began with a private meeting of the accreditation team and GPhC representatives on 14 February 2012. The remainder of the event took place on site at the University of Strathclyde’s Institute Of Biomedical Sciences on 15 and 16 February 2012. The visit comprised a series of meetings with senior staff, teaching staff and students, and included a tour of the University facilities.

Accreditation team

The GPhC’s accreditation team (‘the team’) comprised:

<table>
<thead>
<tr>
<th>Name</th>
<th>Designation at the time of accreditation event</th>
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<tbody>
<tr>
<td>Mr Peter Curphey*</td>
<td>Accreditation team leader (pharmacist), Community Pharmacy Consultant</td>
</tr>
<tr>
<td>Mr Andy Husband</td>
<td>Accreditation team member (Academic), Director of Education (Pharmacy), Senior Teaching Fellow, University of Durham</td>
</tr>
<tr>
<td>Prof Brenda Costall</td>
<td>Accreditation team member (Academic), Former Head of School of Pharmacy, University of Bradford</td>
</tr>
<tr>
<td>Mr Ian Smith</td>
<td>Accreditation team member (Community pharmacy representative), community pharmacist and teacher practitioner, University of Manchester</td>
</tr>
<tr>
<td>Mrs Helen Howe</td>
<td>Accreditation team member (Hospital pharmacy representative), chief pharmacist, Addenbrooke’s Hospital, Cambridge</td>
</tr>
<tr>
<td>Dr Linda Hakes</td>
<td>Accreditation team member (Industrial pharmacy representative), industrial pharmacist, UCB Group</td>
</tr>
<tr>
<td>Mr Alan Kershaw</td>
<td>Accreditation team member (Lay member), Chair of ILEX Professional Standards Ltd</td>
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along with:

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<tr>
<th>Name</th>
<th>Designation at the time of visit</th>
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<tr>
<td>Ms Joanne Martin *</td>
<td>Quality Assurance Manager (Education), General Pharmaceutical Council</td>
</tr>
<tr>
<td>Mr Damian Day</td>
<td>Head of Education and Registration Policy, General Pharmaceutical Council (Observer)</td>
</tr>
<tr>
<td>Ms Philippa Strevens</td>
<td>Quality Assurance Officer, General Pharmaceutical Council (Rapporteur)</td>
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*attended pre-visit meeting on 13 January 2012

Declaration of potential conflicts of interest

No declarations were made.
## Meeting the accreditation standards

<table>
<thead>
<tr>
<th>Standard 1 – Patient and public safety</th>
<th>Accreditation team’s commentary</th>
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<tr>
<td>There must be clear procedures to address concerns about patient safety arising from initial pharmacy education and training. Concerns must be addressed immediately.</td>
<td>The team was confident that this standard is met. The team learnt that the Strathclyde Institute of Pharmacy and Biomedical Sciences (SIPBS) has various systems in place which aim to ensure patient safety. The student fitness to practise procedures, which were approved previously by the GPhC, have been in place from the start of the 2010/2011 academic year and are introduced to students at the start of the course, along with the <em>Code of conduct for pharmacy students</em> and <em>Standards of conduct, ethics and performance</em>. These are revisited throughout the course and immediately prior to undertaking placements in practice. Placements are a formal arrangement with the NHS, and site tutors and supervisors are assigned to both quality assure the placement and to ensure that students are appropriately supervised at all times. Any issues relating to a student’s health or conduct that affect their fitness to practise as a student are fed back to the University via the site tutor, class co-ordinators, lectures or personal tutors. Students may also access support from these individuals.</td>
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<tr>
<th>Standard 2 – Monitoring, review and evaluation of initial education and training</th>
<th>The team was confident that this standard is met</th>
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<tr>
<td>The quality of pharmacy education and training must be monitored, reviewed and evaluated in a systematic way.</td>
<td>The team was satisfied with the systems, roles and responsibilities and lines of accountability in place at SIPBS but could not determine from the documentation how SIPBS monitored and quality assured the delivery of the course at IMU: contact between the two sites appeared to be minimal. The team was reassured to hear that the number of visits to IMU had recently been increased. In addition the team heard that although there were a relatively small number of formal visits and face-to-face meetings, a good level of communication was maintained between the two sites, through regular email and telephone contact. The team heard that there are a range of mechanisms for receiving student feedback including class evaluation questionnaires, placement evaluations, the Student: Staff Committee, as well as informal feedback through lectures, tutors and class co-ordinators. Feedback is acted upon where appropriate on an ongoing basis and student feedback is considered formally as part of the annual course review. The team was satisfied with the mechanisms in place for receiving feedback from students but was surprised that the students they met were not aware of the introduction of the new MPharm course and the new education standards for pharmacists and had not been consulted during the development of the new course. The team suggested that the institute might consider seeking views from students on future course developments.</td>
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*General Pharmaceutical Council, MPharm reaccreditation report (UK and 2+2 overseas provision)*  
*University of Strathclyde (in collaboration with IMU, Malaysia), 15-16 February 2012*
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<th>Standard 3 – Equality, diversity and opportunity</th>
<th>The team was confident that this standard would be met once condition 1 is addressed satisfactorily.</th>
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<tr>
<td>Initial pharmacy education and training must be based on principles of equality, diversity and fairness. It must meet the requirements of all relevant legislation.</td>
<td>Although consideration had been given to equality and diversity issues there did not appear to be a specific equality and diversity policy in place at either the SIPSB or IMU. The team agreed that this area required further attention to ensure that all aspects of the Equality Act 2010 were fully embedded into the course.</td>
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<td>The team recognised that the Institute had gone some way to train staff in this area, but considered that the training was not fully adequate as it did not appear to be based on all the principles of the Equality Act 2010. The team took the view that this training should be compulsory for all staff involved in the course, and not limited to admissions staff. As such the team advised that it would be a condition of reaccreditation that both sites review their Equality and Diversity strategy, which should be informed by the most up-to-date legislation in this area which is currently the Equality Act 2010 (See condition 1).</td>
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<th>Standard 4 – Selection of students and trainees</th>
<th>The team was confident that this standard would be met once Condition 1 is addressed satisfactorily</th>
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<td>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.</td>
<td>The entry requirements for the course were clearly defined and it was apparent that these were communicated to prospective students. Selection is based on qualifications and the content of written applications. The team advised that those staff involved in selection at Strathclyde must undertake training which is based on the Equality Act 2010 (See Condition 1).</td>
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<td>The team was told that the Institute’s prior learning arrangements permit applicants with an honours degree in a science subject closely related to pharmacy to enter straight into year 2 of the course. The team heard that there is currently no formal mechanism in place for the students to demonstrate that they meet the Year 1 outcomes before entering year 2. The team therefore recommended that a formal process be introduced to ensure that these students are not disadvantaged as they progress through the course and to assure the Institute that all those passing the course have achieved all of the required learning outcomes (See recommendation).</td>
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<th>Standard 5 – Curriculum delivery</th>
<th>The team was confident that this standard would be met once conditions 2 and 3 have addressed satisfactorily</th>
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<td>The curriculum for MPharm degrees and the pre-registration scheme must</td>
<td>From review of the course documentation and through discussions with teaching staff, the team was made aware of a number of detailed examples of integrated teaching sessions, and was told about the new integrated module ‘Bench to Bedside’ introduced into year 4. The team agreed that, although there were some good examples of integrated teaching</td>
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Deliver the outcomes in Standard 10. Most importantly, curricula must ensure students and trainees practice safely and effectively.

Content, there was not sufficient evidence to give them confidence that the curriculum was fully integrated, as the science and practice elements of pharmacy had not been fully integrated across the entire four years of the course. The team advised that it would be a condition of reaccreditation that the content and structure of the curriculum are reformulated in order to meet standard 5.1 (See condition 2).

The team agreed that the extensive research programme at SIPBS is a particular strength of the course and heard a number of examples of how this research is used to inform teaching content and to develop students’ research skills and their interest in pharmacy research.

The arrangements for students to gain practice experience during the course were currently limited, out of line with that of other providers, and not currently sufficient to meet criterion 5.6. The team recognised that the Institute’s work to date, and future plans to address the shortfall in practice experience, were going some way to make improvements in this area, but agreed that the requirement needed to be addressed more quickly than described in current plans. The team advised that it was not appropriate to rely on students to arrange their own work experience to make up for the shortfall in practice opportunities offered within the course. The team advised that the amount of practice experience within the course would need to be increased, take place in all years, and be built upon over the four years of the course in order to meet criterion 5.6. The team advised that it would be a condition of reaccreditation that the practice experience strategy is developed to ensure that this criterion is met. In doing so, the Institute should consider that practical experience need not necessarily be work placements but could be any appropriate learning from, or exposure to, patients and health professionals and so the Institute may therefore wish to explore a range of other options (see condition 3).

Following clarification from staff members, the team was satisfied that the range of assessments and the related academic regulations were appropriate and consistent with safe practice. Although the assessment strategy at SIPBS and IMU is identical, the team heard that, due to the difference in the term times at the two sites, the same assessment papers could not be used. The team was reassured however to hear that a process was in place for SIPBS to review all IMU assessments to ensure that the level of difficulty and type of questions is consistent with that used at SIPBS. Similarly it was confirmed to the team that all assessments at IMU are double marked at SIPBS.

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<th>Standard 6 – Support and development for students and trainees</th>
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<td>Students and trainees must be supported to develop as learners and</td>
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<td>The team was confident that this standard is met.</td>
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The team was satisfied with the support for students, which includes academic support from personal tutors, lecturers and class co-ordinators who are a mix of practitioners, scientists and pharmacists and non-pharmacists. Students who met with the team agreed that the approachable and supportive tutors and lecturers were one of the best aspects of the course at Strathclyde. In terms of developing as professionals and learning about the world of pharmacy, students who met with the
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<th><strong>professionals during their initial education and training.</strong></th>
<th><strong>team expressed that they would welcome further support from the University in signposting them to pharmacy events or local groups that might be relevant and of interest.</strong></th>
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<tr>
<td><strong>Standard 7 – Support and development for academic staff and pre-registration tutors</strong></td>
<td><strong>The team was confident that this standard is met</strong></td>
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<td>Anyone delivering initial education and training should be supported to develop in their professional roles</td>
<td>The team was satisfied with the support and training and development opportunities available for staff and was reassured to hear that all new staff received an induction and that the induction for non-pharmacist members of staff focused on a pharmacy context. New teaching staff at both sites (SIPBS and IMU) are mentored by an experienced member of the teaching staff who attends their lectures and provides feedback on their teaching. SIPBS teaching staff are required to undertake a teaching qualification. Staff members receive annual performance and development reviews, and the team heard a new review process is in place, which staff members expressed worked well and was clear and uncomplicated. The team was satisfied that there was also consideration given to staff workload and to the balance of teaching and research commitments and that ongoing review of the workload model was being undertaken to ensure it was fit for purpose.</td>
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<tr>
<td><strong>Standard 8 – Management of initial education and training</strong></td>
<td><strong>The team was confident that this standard is met.</strong></td>
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<td>Education and training must be planned and maintained through transparent processes which must show who is responsible for what at each stage</td>
<td>The management structure of the MPharm and relevant committees within SIPBS was clearly described to the team and they were satisfied that appropriate structures were in place. The team was reassured to hear that there is an MPharm management committee in place at IMU and that there is a defined process for ensuring that changes made to the course or regulations at SIPBS are communicated to IMU and appropriate action taken. In terms of the development of the course, the team heard that the SIPBS’ Teaching, Learning and Assessment Committee maintains a holistic oversight of all courses within the Institute, with a view to developing each course. The team was satisfied that there is a process in place, but agreed that the course might benefit from an academic pharmacist in a professional leadership role to help drive the strategic planning of the course’s design and delivery, given that the MPharm Director’s role appeared to be focused on the operational side of the course rather than its strategic development.</td>
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<td><strong>Standard 9- Resources and capacity</strong></td>
<td><strong>The team was confident that this standard is met</strong></td>
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<td>Resources and capacity are sufficient to deliver outcomes.</td>
<td>In terms of staffing resource, the team was satisfied that there appeared to be an appropriate balance in the staff team at SIPBS between practitioners and academics. The team considered that the ratio of pharmacists to non-pharmacists within the staff team was fairly low, but was reassured by the Head of Institute’s confirmation that this would be monitored on an</td>
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ongoing basis and addressed if the number of pharmacists fell to a level that was no longer deemed sufficient. The team was assured that the lack of GB pharmacists on the staff teaching team at IMU had been addressed through a secondment arrangement whereby five pharmacist teaching staff at Strathclyde undertake sessional teaching of some of the pharmacy practice modules at IMU.

The team agreed that the accommodation and facilities were a particular strength of the course. The team viewed the new laboratories and practice teaching areas within the new Hamnett Wing and agreed they were well designed and fully appropriate for the teaching and learning activities of the MPharm course.

Students studying at SIPBS gave positive feedback on the new Virtual Learning Environment and agreed that they had good access to computers, printing, and books and journals which they could access both via the library and e-library. IMU students were also satisfied with their access to learning resources. The team heard that although the physical library at IMU is relatively small, students have access to a good range of online resources. It was confirmed that SIPBS instruct IMU as to the required resources for the course: these are reviewed by SIPBS during annual monitoring visits to IMU. Students at SIPBS agreed that one of the best aspects of the course at IMU was the modern facilities and equipment available to them.

### Standard 10 - Outcomes

During sub-group sessions with science and practice teaching staff, team members were able to explore a sample of learning outcomes to gain greater understanding of how each was taught and assessed and how on a wider scale the teaching content fitted together. Staff members gave a good account of how the course was able to ensure that students gained knowledge of the subject and developed this knowledge through the course. The team was confident that the course would ensure that students had demonstrated that they could meet all the learning outcomes, at the required level.

The team heard some good examples of teaching sessions that included integrated science and practice content. The team, however, had some concern that the structure of the curriculum into modules with specific science or practice themes wouldn’t allow students to fully grasp the integration between the two, and to gain an integrated view of the science and practice elements of pharmacy.

### Indicative Syllabus

Following review of the curriculum content and through detailed exploration of a number of themes with teaching staff the team was confident that the indicative syllabus would be covered.
Summary and conclusions

The accreditation team agreed to recommend to the Registrar of the General Pharmaceutical Council that the University of Strathclyde should be reaccredited to provide an MPharm degree for a further period of two years, subject to meeting three conditions. This recommendation included the provision of the University of Strathclyde’s 2+2 MPharm degree taught in part overseas in collaboration with the International Medical University (IMU), Malaysia.

The three conditions of reaccreditation relate to provision at both institutions.

Conditions:

1. To embed in staff training, adhere to and teach the Equality Act 2010. This is because the current training and teaching in this area is not adequate. This is to meet standard 3.2

   The deadline for submission of a strategy to GPhC for approval to address this condition is 1 August 2012, for implementation at the start of the 2012/2013 academic year.

2. To reformulate the content and structure of the curriculum to demonstrate a fully integrated MPharm degree. This is because, although the team recognised that the Institute had developed aspects of integrated content, there was little evidence that a fully integrated curriculum had been developed. This is to meet standards 5.1, 5.2 and 5.5.

   The integration must be evidenced to the accreditation team who will visit in early 2014.

3. To develop a practice teaching, IPL, and PPI strategy which must strengthen and integrate placements, in-class practice teaching, IPL and meaningful patient involvement.

   This is because the team has heard from students that there is currently a disconnect between placements and in-class work. The placement provision is significantly lower than other schools, without a rationale for the level of provision. Part time work is out of the control of the institute and is therefore not consistent for all students: it should not be recognised as an alternative. This is to meet standard 5.6 which states that the MPharm degree curriculum must include practical experience of working with patients, carers and other healthcare professionals. Practical experience should increase year on year.

   The deadline for submission of a strategy to the GPhC for approval is 1st May 2012. The deadline for implementation of the strategy is the start of the 2012/2013 academic year.
The accreditation team made the following recommendation:

1. The Institute should consider introducing a formal process for assessing the prior learning of students permitted to enter straight into year 2 to ensure that they are able to meet the same Year 1 learning outcomes as those students who have completed year 1 of the course. This is in relation to criterion 5.7.

The accreditation team identified the following strengths:

- Exceptional research provision
- Investment in the estate

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 of, and website for viewing, the General Pharmaceutical Council’s summary reports of degree accreditation exercises, of the main actions in response, and of the timetable for future accreditation exercises.

The Pharmacy Order 2010 states:

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

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

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

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

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 practice 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 way.

2.1 There must be systems and policies in place covering the following:
   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 opportunity

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

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.

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 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 practice 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. 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 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

General Pharmaceutical Council, MPharm reaccreditation report (UK and 2+2 overseas provision)
University of Strathclyde (in collaboration with IMU, Malaysia), 15-16 February 2012
Outcomes for the initial education and training of pharmacists

10.1 Expectations of a pharmacy professional

<table>
<thead>
<tr>
<th>Learning outcome</th>
<th>MPharm</th>
<th>Pre-reg</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Recognise ethical dilemmas &amp; respond in accordance with relevant codes of conduct and behaviour</td>
<td>Shows how</td>
<td>Does</td>
</tr>
<tr>
<td>b. Recognise the duty to take action if a colleague’s health, performance or conduct is putting patients or public at risk</td>
<td>Knows how</td>
<td>Knows how</td>
</tr>
<tr>
<td>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</td>
<td>Does</td>
<td>Does</td>
</tr>
<tr>
<td>d. Apply the principles of clinical governance in practice</td>
<td>Knows how</td>
<td>Does</td>
</tr>
<tr>
<td>e. Demonstrate how the science of pharmacy is applied in the design and development of medicines and devices</td>
<td>Shows how</td>
<td>Knows how</td>
</tr>
<tr>
<td>f. Contribute to the education and training of other members of the team, including peer review and assessment</td>
<td>Shows how</td>
<td>Does</td>
</tr>
<tr>
<td>g. Contribute to the development of other members of the team through coaching and feedback</td>
<td>Knows how</td>
<td>Shows how</td>
</tr>
<tr>
<td>h. Engage in multidisciplinary team working</td>
<td>Knows how</td>
<td>Does</td>
</tr>
<tr>
<td>i. Respond appropriately to medical emergencies, including provision of first aid</td>
<td>Knows how</td>
<td>Shows how</td>
</tr>
</tbody>
</table>

10.2 The skills required in practice

10.2.1 Implementing health policy

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

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

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

**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**

<table>
<thead>
<tr>
<th>Learning outcome</th>
<th>MPharm</th>
<th>Pre-reg</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Ensure quality of ingredients to produce medicines and products</td>
<td>Knows how</td>
<td>Shows how</td>
</tr>
<tr>
<td>b. Apply pharmaceutical principles to the formulation, preparation and packaging of products</td>
<td>Shows how</td>
<td>Shows how</td>
</tr>
<tr>
<td>c. Verify safety and accuracy utilising pharmaceutical calculations</td>
<td>Shows how</td>
<td>Shows how</td>
</tr>
<tr>
<td>d. Develop quality management systems including maintaining appropriate records</td>
<td>Shows how</td>
<td>Shows how</td>
</tr>
<tr>
<td>e. Manage and maintain quality management systems including maintaining appropriate records</td>
<td>Shows how</td>
<td>Does</td>
</tr>
</tbody>
</table>

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

10.2.5 Maintaining and improving professional performance

<table>
<thead>
<tr>
<th>Learning outcome</th>
<th>MPharm</th>
<th>Pre-reg</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Demonstrate the characteristics of a prospective professional pharmacist as set out in relevant codes of conduct and behaviour</td>
<td>Does</td>
<td>Does</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>b. Reflect on personal and professional approaches to practice</td>
<td>Does</td>
<td>Does</td>
</tr>
<tr>
<td>c. Create and implement a personal development plan</td>
<td>Does</td>
<td>Does</td>
</tr>
<tr>
<td>d. Review and reflect on evidence to monitor performance and revise professional development plan</td>
<td>Does</td>
<td>Does</td>
</tr>
<tr>
<td>e. Participate in audit and in implementing recommendations</td>
<td>Knows how</td>
<td>Shows how</td>
</tr>
<tr>
<td>f. Contribute to identifying learning and development needs of team members</td>
<td>Knows how</td>
<td>Does</td>
</tr>
<tr>
<td>g. Contribute to the development and support of individuals and teams</td>
<td>Knows how</td>
<td>Does</td>
</tr>
<tr>
<td>h. Anticipate and lead change</td>
<td>Knows how</td>
<td>Shows how</td>
</tr>
</tbody>
</table>

**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)