General Pharmaceutical Council

Master of Pharmacy degree (MPharm) taught in part overseas (2+2)

University of Reading (Malaysia)

Report of a step 3 accreditation event
May 2018

Event summary and conclusions	
Provider	University of Reading (Malaysia)
Course	Masters of Pharmacy degree (MPharm)
Event type	Accreditation
Step	Step 3
Event date	14-15 May 2018
Accreditation period	2017/18 – 2019/20
Outcome	Approval The accreditation team agreed to recommend to the Registrar of the General Pharmaceutical Council (GPhC) that the 2 + 2 MPharm degree provided by the University of Reading should be fully accredited and move from a position of working towards accreditation to being subject to reaccreditation to align with the MPharm degree at the University of Reading UK.
Conditions	There were no conditions.
Standing conditions	Please refer to Appendix 1
Recommendations	No recommendations were made.
Registrar decision	Following the event, the Registrar of the GPhC accepted the accreditation team's recommendation and approved the full accreditation of the programme with reaccreditation to align with the MPharm degree at the University of Reading UK.
Key contact (provider)	Kate Fletcher, Acting Head of Pharmacy, Malaysia
Accreditation team	Professor Andrew Husband (Team Leader) Professor of Clinical Pharmacy and Head of School Newcastle University Dr Adam Todd (Academic) Reader in Pharmaceutical Public Health School of Pharmacy Newcastle University Professor Chris Langley (Academic) Professor of Pharmacy Law & Practice and Head of the School of Pharmacy, Aston University; Associate Dean, Taught Programmes, School of Life and Health Sciences Dr Ruth Edwards, (Academic) Lecturer in Pharmacy Practice, Robert Gordon University Mr Owen Wood (Pharmacist – recently registered) Humanitarian Pharmacist, Save the Children Ms Leonie Milliner, (Lay member) Chief Executive, Association for Nutrition

GPhC representative	Ms Joanne Martin, Quality Assurance Manager, GPhC
Rapporteur	Professor Brian Furman, Emeritus Professor of Pharmacology, University of Strathclyde

Introduction

Role of the GPhC

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). 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'.

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.

The powers and obligations of the GPhC in relation to the accreditation of pharmacy education are legislated in the Pharmacy Order 2010. For more information, visit:
http://www.legislation.gov.uk/uksi/2010/231/contents/made

Background

The Department of Pharmacy (also known as Reading School of Pharmacy - RSoP), part of the School of Chemistry, Food and Pharmacy (SCFP) at the University of Reading (UoR) graduated its first students from its accredited MPharm degree in 2009. In 2012, the Department approached the GPhC to discuss its intention to develop a 2+2 MPharm degree in the newly-established EduCity in Johor Bahru, Malaysia. In 2013, the GPhC visited the University to hear of the progress with this development, which also included the delivery of a non-GPhC-accredited BPharm programme running alongside the proposed MPharm. An outcome of this meeting was to split the Step 1 accreditation process into two parts, the first part of which was a preliminary visit for the University to set out its vision and strategy, and for the accreditation team to view the progress on building and facilities. It was also agreed that the target date for the first intake of students would be January 2016, in order to accommodate any potential adjustments required as a result of the Part 1 accreditation visits. This part 1 visit took place on 6 May 2014, when the accreditation team agreed that the University of Reading should be permitted to move from Step 1, Part 1 to Step 1, Part 2 of the accreditation process for new MPharm degrees delivered in part overseas. The accreditation team requested further information from the provider in advance of the Step 1, Part 2 visit, including an updated business plan to show the MPharm separate from the BPharm. The accreditation team informed the provider that for the Step 1, part 2 visit, the programme must be 'student-ready' with everything in place for Year 1 and plans for Year 2 well developed, and that, in the meantime, any recruitment material produced for the 2+2 programme must make it absolutely clear that the provider was working towards accreditation. The Step 1, Part 2 visit took place on 22-23 October 2015 when the accreditation team agreed to recommend to the Registrar of the General Pharmaceutical Council that the 2+2 MPharm degree planned at the University of Reading should proceed from Step 1 to Step 2 of the accreditation process with no conditions or recommendations; this allowed the University to enrol students on to the programme subject to the necessary requirements being met for the Malaysian authorities. In granting this provisional accreditation, the team shared with the University its concern about the lack of clarity around the business plan, particularly relating to the synergy between

the BPharm and proposed MPharm 2+2 degree programmes. A step 2 visit took place in May 2017 when the team recommended progression to step 3, subject to the condition that the University was required to organise the MPharm managerial structure to ensure there is appropriate capacity, resource allocation and financial autonomy; this was because the GPhC requires a school of pharmacy to deliver an MPharm as a single entity, irrespective of geographical location and was to meet criteria 8.1 a, 8.1.b, 9.1a and 9.1.b.iii. It was agreed that the step 3 accreditation team should determine if this condition was met.

Documentation

Prior to the event, the provider submitted documentation to the GPhC in line with the agreed timescales. The documentation was reviewed by the accreditation team and it was deemed to be satisfactory to provide a basis for discussion.

Pre-visit

In advance of the main visit, a pre-visit meeting took place by teleconference on 29 March 2018. The purpose of the pre-visit meeting was to prepare for the event, allow the GPhC and the university to ask any questions or seek clarification, and to finalise arrangements for the visit.

The event

The event began with a private meeting of the accreditation team and GPhC representatives on 14 May 2018. The remainder of the event took place onsite at the University of Reading Malaysia on 14-15 May 2018, and comprised a series of meetings with staff and students of the University, and included a tour of the University facilities.

Declarations of interest

There were no declarations of interest.

Key findings

Standard 1: Patient and public safety

The team was satisfied that all criteria relating to this standard are met. (See Appendix 2 for criteria)

The School has systems to ensure that students do not jeopardise patient safety. Students entering Part 1 of the MPharm 2+2 programme at the University of Reading Malaysia (UoRM) are introduced to the GPhC 'Standards for Pharmacy Professionals' and their relevance at the beginning of the course; they are reminded of these standards annually. The University has comprehensive 'Fitness to Practise Procedures' that apply to all professional programmes; these were developed in collaboration with Reading School of Pharmacy and students are introduced to them along with the 'Standards for Pharmacy Professionals'. MPharm 2+2 students are also introduced to the Pharmacy Board of Malaysia 'Code of Conduct for Pharmacists and Bodies Corporate'. Students on placement in Parts 1 and 2 are always supervised and are never given responsibility for any clinical or legal decision that might jeopardise patient safety. Feedback on placements from the placement hosts is monitored, and any breaches are investigated using fitness to practise procedures. All student interaction with patients, including expert patients, are supervised by registered pharmacists. It is made clear to students throughout the course that they must not carry out tasks for which they are not competent. Behaviour and attendance in class are monitored in line with Malaysian Qualifications Agency requirements governing attendance of students at universities in Malaysia. Unacceptable behaviour, is considered unprofessional and may be considered through fitness to practise procedures. Learning outcomes for all professionalism modules ensure that students

develop self-awareness of their abilities and strive to practise safely at all times. In classes concerned with prescription assessment and medication supply (PAMS), where they undertake dispensing activities, students learn about the importance of following a set process through the use of standard operating procedures (SOPs). Here, they receive formative feedback, which links to the marking scheme; this feeds into the part 3 PAMS classes in the UK, where patient safety is paramount in the assessment. Clinical competence is introduced in Part 2, where students develop case-based pharmaceutical care plans which must demonstrate patient safety. Patient safety, along with effective treatment, is a running theme. Competence in dispensing, calculations, clinical checking and law and ethics is monitored and tested regularly by a combination of written examinations and practical skills assessments. Mark deductions and fail options are used to ensure that students do not pass assessments if their lack of knowledge or skills might pose a risk to patients or the public.

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

The team was satisfied that all criteria relating to this standard will be met.

There are systems in place to monitor, review and evaluate entry requirements, the quality of teaching, learning and assessment, and of placements and other practice learning opportunities, as well as educational resources and capacity. The University of Reading's Centre for Quality Support and Development has worked closely with University of Reading Malaysia to develop quality assurance processes that cover all aspects of quality management and enhancement across both campuses. The University of Reading Malaysia is also subject to Malaysian Qualification Agency requirements, which map to those outlined by the QAA in the UK; the University received its official approval in November 2017. Quality assurance of the programme is undertaken through annual monitoring and periodic review. In relation to annual monitoring, students provide feedback via end of module questionnaires, in a process managed by the University's Centre for Quality Support and Development. These are considered jointly by the module convener (UK) and module lead (Malaysia) who submit an annual report to the Board of Studies, which produces an 'Annual Programme Report' for submission to the School Board of Teaching and Learning (SBTL); the SBTL, in turn, produces an Annual Quality Assurance Report, which is considered by the Sub-Committee on Delivery and Enhancement of Learning and Teaching (DELT). This sub-committee produces an evaluative summary, highlighting examples of good practice and setting out any recommendations arising from the issues identified, which is submitted for approval alongside the reports to the University Board for Teaching and Learning (UBTL). The School Board refers a summary report back to the Board of Studies detailing decisions taken as a result of the reports. In addition to the anonymous module evaluation process, student feedback on the programme is obtained through the Student-Staff Liaison Committee, as well as through feedback given via personal tutors and directly to lecturers, whom they meet to discuss modules; students are represented on a number of committees. Quality assurance also includes formal peer review of teaching as well as informal peer review where staff members undertake joint teaching, for example, in the delivery of practical classes, workshops, and seminars. The success of teaching methods and strategies are regularly reviewed informally, as well as through module meetings. Periodic review takes place every six years, this being undertaken by a panel comprising internal and external members, as well as a student member. The MPharm underwent its latest periodic review in March 2018; The outcome was successful, and in relation to the 2 + 2 programme, the review acknowledged that both campuses were working well together, this having been facilitated by the alignment of the teaching years, with only minor issues being identified. In general, members of the University of Reading Malaysia staff are involved in the development of the MPharm programme through regular and frequent contact with UK colleagues and module leaders, with whom they discuss the modules, as well as developing new lecture material and discussing and providing feedback on examination questions. The quality of placements in community and hospital pharmacy in Malaysia is assured through contractual commitments between placement providers and the University, where contracts outline what is required of placement providers; the students have similar contractual obligations defining their responsibilities while on their placement, and their feedback is used as part of the quality assurance process. When participating in placements, students are normally accompanied by UK-registered pharmacist from the Reading School of Pharmacy Malaysia staff who appraise these visits,

this process having resulted in a number of improvements to support the learning needs of the students. The views of external stakeholders, including patients and industrial stakeholders, are taken into consideration in ensuring the appropriateness of the programme for preparing students for practice.

Standard 3: Equality, diversity and fairness

The team was satisfied that both criteria relating to this standard are met.

The University is committed to equality, diversity and inclusion and its Equality and Diversity Objectives guide the actions the University will take to ensure that nobody, including applicants, students, employees, or users of facilities is discriminated against on the grounds of their protected characteristics. There is a Diversity and Inclusion Team that provides co-ordination and support for diversity and inclusion efforts of staff and students across the University; the team includes two Deans for Diversity and Inclusion, a University Diversity an Inclusion Adviser, a member of the HR team and the Director of Student Success and Engagement. Progress in this area is assessed through annual equality-related data reports referring both to students and staff; these reports make recommendations for future action. The University has obtained an institution level Athena SWAN Bronze Award and is currently working towards a Silver application; the University of Reading Malaysia is submitting an application for recognition of the Malaysia campus. Reading School of Pharmacy Malaysia is governed by the same over-arching policies and procedures used across the whole University and has contributed significantly to their development. Clear guidance is provided to staff at both campuses on diversity and inclusivity, and all staff members undertake mandatory training, which is registered on the Staff Development training website; members of staff are aware of the differences between Malaysia and the UK in the context of equality and diversity. Where laws and cultures between the two countries do not agree, the University of Reading Malaysia campus follows policies and procedures that align to UK law, providing an inclusive environment based on UK ideals without acting against current Malaysian legislation. MPharm 2+2 students are introduced to equality diversity and inclusion as part of their Welcome Week, and these concepts are reinforced throughout the course; they are made aware of UK legislation and are taught to respect patients and to be non-judgemental.

Standard 4: Selection of students

The team was satisfied that all criteria relating to this standard are met.

The admissions process at Reading School of Pharmacy Malaysia is managed both centrally and at Section level, and complies with current university-wide legislation. The process is Section led, and comprehensively supported by the central Admissions Office. The selection criteria are detailed on the Reading School of Pharmacy Malaysia website. These include academic entry requirements and details of how to apply; after application, students receive a link to the Reading School of Pharmacy home page, which provides further details of the University and the course, information about pharmacy careers and about the Standards for Pharmacy Professionals, as well as about the essential health and good character checks. Academic entry requirements are based on appropriate grades, advertised at ABB (A level or equivalent) in the UK, but from BBB and above in Malaysia, due to cultural differences existing in the applications process in Malaysia, where it has been established that students will not apply to an institution with grades advertised at a higher level than they personally expect to achieve. All applicants must also have a grade B (or higher) in GCSE Maths and a grade C (or higher) in GCSE English; applicants whose first language is not English must also have formal English language qualifications. All applicants who are based in Peninsular Malaysia attend the University of Reading Malaysia campus for interviews; alternatively, they may be interviewed at recruitment fairs by Reading School of Pharmacy Malaysia staff, or, for overseas applicants based in Sabah or Sarawak, be interviewed by Skype or telephone. The selection criteria are explicit, and all students are interviewed using a standardised interview form. All applicants must demonstrate commitment to the profession, as evidenced, for example, by previous experience in hospital or community pharmacy, a work experience placement organised by the

applicants' schools, or a statement of intent to arrange to undertake such experience prior to enrolling on the course. Most applicants who are selected for interview are invited, with family members, to attend a visit day, during which they receive comprehensive talks from the Head of Section, lecturing staff, and additionally have the opportunity to talk in detail with Reading School of Pharmacy Malaysia staff members as well as student representatives.

Standard 5: Curriculum delivery and student experience

The team was satisfied that all criteria relating to this standard will be met.

The MPharm was reaccredited by the GPhC in 2014 against a new, integrated curriculum, and underwent a successful interim visit in March 2017. The current programme was developed with Reading School of Pharmacy Malaysia 2+2 students in mind, in order to ensure that facilities, resources and staff were appropriate for delivery of an equivalent experience across the two campuses. The MPharm degree, whether delivered entirely in the UK, or across two campuses, utilises an integrated and patient-centred curriculum that incorporates the physical and social sciences and the professional skills necessary for students to develop an evidence-based approach to clinical decision making and professional conduct. The new programme uses many cross-disciplinary examples and case studies, and links teaching materials to ensure students identify links between topics and cognate disciplines. Only Parts 1 and 2 are delivered on the Malaysian campus, with the curriculum being identical on both campuses but with a few minor variations in delivery to reflect the Malaysian context. Part 1 introduces key concepts of science, covering physiology medicines discovery, design, development and delivery, and introduces students to professionalism and practice, providing students with a strong understanding of core knowledge in the context of pharmacy. Part 2 consists of four modules covering therapeutics and the optimisation of medicines, along with the delivery of pharmaceutical services. The therapeutic topics cover diseases of the gastrointestinal tract (GIT), respiratory, cardiovascular and renal systems, with integrated consideration of the relevant core science and practice concepts; these include toxicology, pharmacology, medicinal chemistry, analytical skills in science and practice, dosage form design, alternative therapies, public health, pharmacy law, pharmaceutics, and practice aspects of drug administration. Parts 3 and 4 are delivered entirely on the UK campus, although Part 4 students who are not on the 2 + 2 programme may travel to University of Reading Malaysia to undertake their final year research projects module. The strategies for teaching, learning and assessment have been designed to engage students in their learning so that they become independent learners and reflective practitioners. Students develop independent learning skills through engagement in a range of activities, including problem-based learning, case studies, preparing critical review articles, and research dissertations, as well as through maintenance of their personal and academic development (PAD) portfolios. Parts 1 and 2 incorporate practical experience of working with patients and other healthcare professionals through placements in community and hospital pharmacy and inter-professional education, the last currently being undertaken largely with medical students from Newcastle University Medical School Malaysia (NUMed), which shares the campus. MPharm students at Reading School of Pharmacy Malaysia spend time communicating virtually with students on the UK campus to reflect on their placement experiences and compare practice in the two countries. Assessments are designed to ensure that students meet the GPhC's standard 10 learning outcomes and use a variety of methods, including written examinations, oral and poster presentations, objective structured clinical examinations (OSCEs), practical tests, and written coursework assignments. Assessment marking criteria focus on assuring safe and effective practice and incorporate severe mark deductions for work where the student's performance is considered unsafe or where there has been evidence of academic misconduct. Unsafe practice in professionally focussed assessments results in failure.

Standard 6: Support and development for students

The team was satisfied that the single criterion relating to this standard is met.

All students have personal tutors who provide pastoral support, as well as encouraging and fostering their academic development; tutors can signpost students to all the relevant central support services and play an important role in monitoring students' personal and academic development portfolios. All new students meet their tutors during 'Welcome Week' and there are scheduled meetings each term, although students may meet their tutors at any time to discuss any issues or problems; students have e-mail access to their tutors, who are also available for meetings or telephone advice after the summer examination results are released. On progressing to Part 2, students, along with their and Reading School of Pharmacy Malaysia personal tutors, meet virtually with the UK tutors who will take over the onsite support of students transferring to the UK campus for Part 3. The pharmacy personal tutor system is overseen by the senior pharmacy tutor, who provides overall management of the process and acts as another point of contact for students. Other support mechanisms include the recently established Reading University Malaysia Students' Association (RUMSA) and the central Student Wellbeing Service, the latter offering support that includes an on-campus counsellor. Advisers from the Student Service at the University of Reading Malaysia offer advice on accommodation, disability, finance, and wellbeing, alongside academic issues and examination related queries. The School operates a buddy system in the UK, and a similar system in Malaysia, to help students integrate into the Department; students are introduced to their buddies during 'Welcome Week', and each year group also has its own WhatsApp social media group. Students on the Malaysian campus are also each allocated a UK buddy who plays an important role in helping the transition to the UK campus, for which a programme of support is in place. This begins with presentations delivered at University of Reading Malaysia covering both general and pharmacy-specific aspects. The cultural transition to the UK includes a variety of informal discussions throughout the two years, a presentation by the International Student Officer, virtual meetings with UK students and the use of Facebook groups. On arrival in the UK, there will be a two-week transition period involving activities led by staff members from both campuses, the activities including a campus tour, welcome talks, introductions to their personal tutors and UK buddies, as well as to other support mechanisms, and visits to community and hospital pharmacy; during this period, they undergo health and good character checks, and are also introduced to the library and the Reading University MPharm Society (RUMPS).

Standard 7: Support and development for academic staff

The team was satisfied that all criteria relating to this standard will be met.

A broad range of support mechanisms allows members of academic staff to develop in their roles. All members of staff undergo an annual performance and development review (PDR) which enables them to discuss and identify their training needs, in which they are supported by their reviewer, the Head of School, and the Centre for Quality Support and Development (CQSD); the PDR process also considers workload. The CQSD provides a large number of training courses and much of the training is replicated on the University of Reading Malaysia campus. New staff members at the University of Reading Malaysia must attend a formal central University induction programme, which provides the essential guide to working at the University. During their induction process, members of staff travel to the UK campus, where they observe teaching by UK staff members, and participate in peer-review, this feeding into their PDR reflections and objectives for the following year. Staff members can gain Fellowship of the Higher Education Academy (HEA) via the FLAIR ('Facilitating Learning and Teaching Achievement and Individual Recognition') programme; this includes the Academic Practice Programme (APP) which comprises three modules and which must be taken by all new academic staff members; there is also a non-taught continuing professional development (CPD) route for experienced staff members. Various CPD courses are available and members of staff and are also encouraged to attend externally-organised networking events and conferences. Regular staff development training and discussion meetings take place at least twice monthly during term time for all teaching staff; these meetings focus on a range of topics that include dissemination of good teaching and assessment practices, use of Blackboard Collaborate, and staff presentations on research and scholarship projects. Additionally, the Pharmacy Director of Teaching and Learning (DTL) uses this forum to keep staff informed of discussions within the various MPharm committees, and obtain feedback from staff. Staff self-development is encouraged through attending

various sessions on specific topics, such as the application of equality and diversity principles in teaching methods, how to achieve publication and the associated challenges, obtaining research funding, as well as other sessions on day-to-day activities such as the University's extenuating circumstances policy. The School of Chemistry, Food and Pharmacy operates a sabbatical scheme, which requires funding to be raised to cover salaries, but also encourages 'mini-sabbaticals' between pairs of staff members, which usually take place over the summer, and through which each member of staff in the pair cover the duties of the other during the sabbatical period. All members of staff receive training in administrative roles, with time made available for training, and all now have administrative responsibilities. The teaching activity of all members of staff is subject to formal peer review, with the provision of constructive feedback. Those members of staff who are not pharmacists, as well as those pharmacists who do not currently undertake clinical practice are required to familiarise themselves with the role of the pharmacist in community and hospital, through discussions with practising pharmacists within the Section, and through their familiarisation with documents relating to the profession. They are also required to undertake a visit to both a hospital and community pharmacy.

Standard 8: Management of initial education and training

The team was satisfied that both criteria relating to this standard will be met

At the step 2 event, the team imposed a condition that the University must organise the MPharm managerial structure to ensure there is appropriate capacity, resource allocation and financial autonomy; this was because of the concern that the Head of the UK School did not have influence over matters relating to Pharmacy at University of Reading Malaysia, with the Head of Pharmacy at UoRM reporting to the Provost rather than to the Head of the UK School. The GPhC requires a School of Pharmacy to deliver an MPharm as a single entity irrespective of geographical location. Accordingly, the University has worked to clarify the management structures and strengthen/clarify the role of the Head of Pharmacy UK in all decision making at University of Reading Malaysia that will impact on the successful delivery of the MPharm 2+2 and the successful development of Pharmacy staff at on the Malaysian campus. The aim of this clarification, and development of a new management structure, is to ensure that the Reading School of Pharmacy Malaysia retains sufficient autonomy, with the support of the senior leadership team, to be able to recruit and appropriately support its own academic staff and students while, at the same time, enabling the UK Pharmacy School to have oversight of, and input to, any changes that might impact delivery of the UK MPharm and the 2+2 MPharm programme. For example, the Head of Pharmacy joins all academic recruitment interviews via video-link, to ensure that there is clear input regarding strategic appointments. The new structure will also serve to clarify management and decision-making routes of different activities, including introduction of programmes and MPharm changes, staff development responsibilities and Performance Development Review (PDR)/promotion and probation structures. The University of Reading Malaysia has now appointed a Deputy Head MPharm 2+2 and Deputy Head MPharm Malaysia to ensure that the day-to-day running of the MPharm 2+2 and development of MPharm Malaysia are overseen, in the event that the Head of Pharmacy Malaysia is working in the capacity as Academic Director (Teaching and Learning). This will also ensure that resource requirements and staffing for the two programmes can readily be identified. As the Head of Pharmacy Malaysia is currently Interim Vice-Provost, there is an acting Head of Pharmacy who has a single, focussed leadership role for Pharmacy, and the University senior management is confident in the leadership of the programme. The Head of Pharmacy UK and Head of Pharmacy Malaysia have pre-scheduled fortnightly meetings; Malaysian Pharmacy Programme Board meetings, chaired by the Head of Pharmacy Malaysia are held three times a year, these being attended by UK colleagues by videoconference. In light of these changes, the team agreed that the condition imposed at the step 2 visit had been met.

Standard 9: Resources and capacity

The team was satisfied that all criteria relating to this standard are met.

At the step 2 event, the team imposed a condition that the University must organise the MPharm managerial structure to ensure there is appropriate capacity, resource allocation and financial autonomy; this was because of the concern that the Head of the UK School did not have influence over matters relating to Pharmacy at the University of Reading Malaysia (UoRM), the Head of Pharmacy at UoRM reporting to the Provost rather than to the Head of the UK School. The revised management structure was described under standard 8. The business plan for the 2 + 2 MPharm programme has been developed and approved jointly between the two campuses; quarterly reports have been submitted to the GPhC in accordance with the condition. The business plan shows a financial loss for the next two to three years and is predicated on a student intake of 20 per year, although the current student numbers comprise only eight who joined part 1 as the second cohort in September 2017 and 11 who are now completing part 2. The student target numbers have been adjusted to be more realistic, and the University, with the backing of the Vice-Chancellor, will support the deficit. The University has developed a realistic marketing and recruitment strategy for the MPharm 2 + 2 degree, and MPharm recruitment will be facilitated through the University's Foundation of Science programme. It will take some time for the programme to break even; assurances have been given that that the student experience will be maintained during this time and that, until the establishment of the proposed Malaysian four-year MPharm, every student starting the 2 + 2 programme will be able to complete Parts 3 and 4 of the degree course in the UK. There has been a significant change in leadership at the University of Reading Malaysia, and the University has ambitious plans for its Malaysian campus. The accreditation team was satisfied that the MPharm managerial structure now ensures that there is appropriate capacity, resource allocation and financial autonomy, and that the Head of the UK School has sufficient influence over matters relating to Pharmacy at the University of Reading Malaysia; thus the condition imposed at the step 2 visit has been met. Recruitment of additional staff will take place as required; the necessary expertise is already in place but new appointments will be made to fill gaps, with all new posts being advertised both in Malaysia and in the UK.

The University of Reading Malaysia offers excellent learning resources that can be accessed by all students and staff. These include a well-equipped Learning Resource Centre (LRC) with a range of study areas, multiple computer laboratories, and rooms that can be booked for group discussions and practising presentations. The LRC supports the provision of e-books and databases, as well as printed copies of books and journals. Extensive use is made of the virtual learning environment, Blackboard, which provides a variety of support resources to support learning, including lecture notes, podcasts, videos, quizzes, module handbooks, links to further reading, and discussion forums. Blackboard Collaborate allows cross-continental virtual tutorials, cross-campus discussions between staff and students, and social interaction between students on both campuses, the last facilitating the transition of students from UoRM to the UK. As well as shared lecture theatres, teaching facilities include a Clinical Skills Centre, a fully-flexible teaching space to provide facilities for dispensing classes and simulation consultation exercises, and a mock-up community pharmacy that allows students the same learning experiences as their UK counterparts. There is also an Aseptic Preparation Unit, a Medicines Synthesis Laboratory and a separate Medicines Manufacturing Unit, with a tableting suite.

Standard 10: Outcomes

The team was satisfied that all 58 outcomes relating to Standard 10 are delivered at the appropriate level.

The team scrutinised the learning outcomes by discussions with the teaching staff meeting 8. Here, four outcomes were selected for detailed discussion, these being 10.1.e, 10.1.g, 10.2.2.c, and 10.2.5.b. In this meeting, the team explored how the outcomes were delivered, how knowledge was integrated, and how the outcomes were assessed to show the appropriate level of achievement ('knows how', 'shows how' or 'does'). Having discussed the selected outcomes with the staff in meeting 8, and having scrutinised the documentation relating to these and to the other outcomes, the team was confident that all 58 outcomes are met at the appropriate levels.

Indicative syllabus

The team was satisfied with the School's use of the Indicative Syllabus to inform its curriculum.

The team agreed that the MPharm degree met the requirements of Directive 2005/36/EC of the European Parliament and of the Council on the recognition of professional qualifications for the initial education and training of pharmacists.

Appendix 1 - Standing conditions

The following are standing conditions of accreditation and apply to all providers:

1. The record and report include other comments from the team, and providers are required to take all comments into account as part of the accreditation process. The provider must confirm to the GPhC that required amendments have been made.
2. The provider must respond to the definitive version of the record and report within three months of receipt. The summary report, along with the provider's response, will be published on the GPhC's website for the duration of the accreditation period.
3. The provider must seek approval from the GPhC for any substantial change (or proposed change) which is, or has the potential to be, material to the delivery of an accredited course. This includes, but is not limited to:
   a. the content, structure or delivery of the accredited programme;
   b. ownership or management structure of the institution;
   c. resources and/or funding;
   d. student numbers and/or admissions policy;
   e. any existing partnership, licensing or franchise agreement;
   f. staff associated with the programme.
4. The provider must produce and submit to the GPhC on an annual basis:
   a. requested data on student numbers and progression and degree awards;
   b. requested information about the extent of human and physical resources it enjoys for the delivery and support of the degree course.
5. The provider must make students and potential students aware that 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.
6. The provider must make students and potential students aware of the existence and website address where they can view the GPhC's accreditation reports and the timetable for future accreditations.
7. Whenever required to do so by the GPhC, providers must give such information and assistance as the GPhC may reasonably require in connection with the exercise of its functions. Any information in relation to fulfilment of these standing conditions must be provided in a proactive and timely manner.

Appendix 2 – Standards

GPhC standards for the initial education and training of pharmacists

NB. Information that is shaded grey or shown in grey italics is only applicable to those wishing to offer a 5-year MPharm degree with intercalated 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 *standards for pharmacy professionals (2017)*;

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 and 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 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 should 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 learning resources that are fit for purpose

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

Standard 10: Outcomes

10.1   Expectations of a pharmacy professional

Learning outcome		MPharm	*Pre-reg*
10.1.a	Recognise ethical dilemmas & respond in accordance with relevant codes of conduct and behaviour	**Shows how**	*Does*
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**	*Knows how*
10.1.c	Recognise personal health needs, consult and follow the advice of a suitably qualified professional, and protect patients or public from any risk posed by personal health	**Does**	*Does*
10.1.d	Apply the principles of clinical governance in practice	**Knows how**	*Does*
10.1.e	Demonstrate how the science of pharmacy is applied in the design and development of medicines and devices	**Shows how**	*Knows how*
10.1.f	Contribute to the education and training of other members of the team, including peer review and assessment	**Shows how**	*Does*
10.1.g	Contribute to the development of other members of the team through coaching and feedback	**Knows how**	*Shows how*
10.1.h	Engage in multidisciplinary team working	**Knows how**	*Does*

10.1.i	Respond appropriately to medical emergencies, including provision of first aid	**Knows how**	*Shows how*

10.2 The skills required in practice

10.2.1 Implementing health policy

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

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

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

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	*Pre-reg*

		MPharm	Pre-reg
10.2.3.a	Ensure quality of ingredients to produce medicines and products	**Knows how**	*Shows how*
10.2.3.b	Apply pharmaceutical principles to the formulation, preparation and packaging of products	**Shows how**	*Shows how*
10.2.3.c	Verify safety and accuracy utilising pharmaceutical calculations	**Does**	*Does*
10.2.3.d	Develop quality management systems including maintaining appropriate records	**Shows how**	*Shows how*
10.2.3.e	Manage and maintain quality management systems including maintaining appropriate records	**Shows how**	*Does*
10.2.3.f	Procure and store medicines and other pharmaceutical products working within a quality assurance framework	**Knows how**	*Does*
10.2.3.g	Distribute medicines safely, legally and effectively	**Knows how**	*Does*
10.2.3.h	Dispose of medicines safely, legally and effectively	**Knows how**	*Does*
10.2.3.i	Manage resources in order to ensure work flow and minimise risk in the workplace	**Knows how**	*Shows how*
10.2.3.j	Take personal responsibility for health and safety	**Does**	*Does*
10.2.3.k	Work effectively within teams to ensure safe and effective systems are being followed	**Knows how**	*Does*
10.2.3.l	Ensure the application of appropriate infection control measures	**Shows how**	*Does*
10.2.3.m	Supervise others involved in service delivery	**Knows how**	*Does*
10.2.3.n	Identify, report and prevent errors and unsafe practice	**Shows how**	*Does*
10.2.3.o	Procure, store and dispense and supply veterinary medicines safely and legally	**Knows how**	*Knows how*

10.2.4 Working with patients and the public

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

10.2.5 Maintaining and improving professional performance

Learning outcome		**MPharm**	*Pre-reg*
10.2.5.a	Demonstrate the characteristics of a prospective professional pharmacist as set out in relevant codes of conduct and behaviour	**Does**	*Does*
10.2.5.b	Reflect on personal and professional approaches to practice	**Does**	*Does*

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

Appendix 3 – Indicative syllabus

It is expected that education providers will use the indicative syllabus to develop a detailed programme of study which will enable pharmacists to meet the learning outcomes.

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)