General Pharmaceutical Council

Master of Pharmacy degree (MPharm)

University of East Anglia

Report of a reaccreditation event
May 2018

Event summary and conclusions

Provider	University of East Anglia
Course	Masters of Pharmacy degree (MPharm)
Event type	Reaccreditation
Event date	1-2 May 2018
Accreditation period	2017/18 – 2023/24
Outcome	Approval The accreditation team agreed to recommend to the Registrar of the General Pharmaceutical Council (GPhC) that the MPharm degree provided by University of East Anglia should be reaccredited for a further period of six years.
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 reaccreditation of the programme for a further period of 6 years.
Key contact (provider)	Dr Anja Mueller, Director of Teaching and Learning
Accreditation team	Professor Stephen Denyer (Team Leader), Pro Vice-Chancellor (Education and Student Experience), University of Brighton Mrs Sandra Hall (Academic), Head of Pharmacy Practice, Leicester School of Pharmacy, De Montfort University Professor Paul Gard (Academic), Deputy Head of School, University of Brighton Professor Andy Husband (Academic), Professor of Clinical Pharmacy and Head of School, Newcastle University Ms Gail Curphey (Pharmacist), Pharmacy consultant Mr Javaad Ayub (Newly Qualified Pharmacist), Medical Adviser, Novartis Mrs Catherine Boyd (Lay member), Chair of fitness to practise panels for various healthcare regulators
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 reaccreditation event was carried out in accordance with the GPhC's 2011 MPharm Accreditation Methodology and the course was reviewed against the GPhC's 2011 education standards 'Future Pharmacists: Standards for the initial education and training of pharmacists'.

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 MPharm at the University of East Anglia is delivered by the School of Pharmacy, one of six schools within the Faculty of Science. The School admitted its first students in 2003 and graduated its first cohort in 2007, following successful completion of Step 7 of the accreditation process, which at that time was undertaken by the Royal Pharmaceutical Society of Great Britain (RPSGB). The programme was reaccredited by the General Pharmaceutical Council in 2012 for a full period of six years without conditions or recommendations. At the 2015 interim visit, a number of points were raised by the team for further consideration. After hearing of plans to prepare staff members for senior management the team encouraged the School to continue with these plans going forward. The team also suggested that the School should consider undertaking a comprehensive analysis of progression, drawing on a broader understanding of the student cohort, for example, considering the admission profile as related to protected characteristics and educational background. Responding to the students' view that current patient facing experience was insufficient and that it should be introduced earlier in the programme, the team encouraged the School to explore ways in which this could be addressed. Finally, there appeared to be some variability in the feedback received by students and the team encouraged the School to consider ways to address these issues. The School has addressed all of these points which are discussed in the record of the present reaccreditation under the relevant criteria.

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 28 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 1 May 2018. The remainder of the event took place onsite at the University of East Anglia on 1-2 May 2018, and comprised a series of meetings with staff and students of the University.

Declarations of interest

There were no declarations of interest.

Key findings

Standard 1: Patient and public safety

All criteria relating to this standard are met. (See Appendix 2 for criteria)

There are systems in place to ensure that students do not jeopardise patient safety. Students are never put in a situation where they are asked to work beyond their competence, and undertake extensive practise sessions in a controlled environment within the School before encountering patients; they are always supervised by a member of staff or placement host when in contact with patients, and are monitored when participating in patient-facing activities. At the start of the course, students receive information about the School's fitness to practise policy, detailing the expectations and procedures, and about the GPhC's 'Standards for Pharmacy Professionals'; they sign a statement of professionalism annually to confirm that they understand and will abide by the standards, and that academic penalties may be applied for unprofessional behaviour. Disclosure and barring service (DBS) checks are performed in year 1 and students are required to make additional self-declarations at the beginning of each year; overseas students are required to submit a letter confirming their character and good standing from a figure of authority from their own country. All students are screened by Occupational Health before commencing placements within the degree and failure to produce appropriate evidence relating to health or good character would prevent a student from participating in any placements. If a staff member, placement host or a fellow student believes that there are concerns relating to student conduct or health that would potentially jeopardise patient safety, these can be reported anonymously to the Chair of the Fitness to Practise Committee; the concern would be reviewed to determine if further investigation and or action is needed. If a student progresses to a fitness to practise hearing, actions may include the provision of additional counselling and support regarding the student's conduct or health, or matters could be escalated to the Senate Student Disciplinary Committee which could impose appropriate sanctions, including exclusion from the School. In all assessments relating to professional and clinical competence, such as objective structured clinical examinations (OSCEs), pharmaceutical care planning assessments and formulation workshops, students will fail if they demonstrate actions that may have jeopardised patient safety.

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

All criteria relating to this standard are 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 responsibilities of the University's Learning and Teaching Committee (LTC) include the development, implementation and review of learning and teaching strategies, the appointment of external examiners and consideration of their reports, arrangements for the regular update, monitoring and review of modules and courses, and the enhancement of the quality of the student academic experience. The Committee works closely with the Science Faculty LTC and the School of Pharmacy Teaching Committee in relation to the internal procedures for the assurance of the

quality of learning, teaching and assessment, including course specification, approvals and quinquennial course reviews. The quality assurance procedures for the course include annual evaluation of modules, input from the five external examiners, and data from the National Student Survey (NSS), as well as formal student feedback through the Staff-Student Liaison Committee (SSLC); students can also provide anonymous feedback regarding any aspect of the course through an online 'feedback box', comments being considered by the Director of Learning and Teaching, the outcomes being subsequently discussed at the SSLC, minutes from which are provided for all students. After the delivery of each module, students complete online module evaluations. The Course Director completes an annual course monitoring and update report which is submitted and considered by the Faculty; this report addresses formal student feedback through the staff student liaison committee, and comments on the external examiners' oral feedback at examination boards, as well as comments on the feedback from placement providers. Additionally, the course is required to be reviewed internally every five years; the next MPharm quinquennial review will take place in 2020. The quality of community placements is assured via a combination of annual meetings with placement hosts, together with feedback from students, which is provided using an online questionnaire. Hospital placements are all conducted by the School's teacher-practitioners, and students again provide online feedback on these placements. In order to ensure that all students derive benefit from placements, the School offers training to providers and hospital teacher-practitioners in a 'placements evening', where information is also given on the experiences that should be offered. The School receives input from an External Advisory Board which, together with input from students, patients and placement providers, has contributed to the development of the new MPharm programme (see standard 5).

Standard 3: Equality, diversity and fairness

Both criteria relating to this standard are met.

The University has a dedicated Equality and Diversity office, which helps to collate data on equality and diversity matters across the campus in relation both to staff and students. A reliable framework has been developed within which to identify and develop issues of equality at the University; there is a continuous programme of statistical development which will eventually achieve a full 'pipeline' of information from the admission of a student or recruitment of a member of staff to their eventual graduation or decision to leave, all disaggregated by equality characteristics. The School's Equality Committee meets eight times a year, and deals with all equality and diversity issues in the School. The School received an Athena SWAN Bronze award in 2013, which was renewed in 2014 and 2016. At the interim visit in 2015, the visiting team suggested that the School should consider undertaking a comprehensive analysis of student progression, drawing on a broader understanding of the student cohort, for example, considering the admission profile relating to protected characteristics and educational background. A subsequent analysis on progression has revealed some issues relating to gender and race; for example, this showed that the first year continuation rate for BME students is not as good in the School as in the rest of the University; further work is in progress to explore the underlying reasons and the School is looking carefully at student attendance and engagement. All staff within the School of Pharmacy have received bespoke training in equality and diversity and have completed an online 'Diversity in the Workplace' module. Training sessions on 'unconscious bias' have also been carried out for University staff. The principles of equality and diversity are embedded across the MPharm curriculum, including coverage in the first year of the fundamentals of the relevant law, illustrated by case examples, and emphasising how this relates to the GPhC's 'Standards for Pharmacy Professionals'. Equality and diversity are woven into teaching scenarios, and the principles are often illustrated serendipitously by cases arising in clinical topics, such as a consideration of emergency hormonal contraception.

Standard 4: Selection of students

All criteria relating to this standard are met.

The admissions process is managed centrally by ARM (Admissions, Recruitment and Marketing). Information on the MPharm is provided in the University prospectus and MPharm course brochures, as

well as on the University and School of Pharmacy website. Students are selected on their A-Level grades and on success in the interview process; they must also undergo DBS and health checks on arrival at the University just before the commencement of the course. Offers of places on the MPharm are currently made on the basis of applicants achieving either AAB at A-level, including chemistry and a second science from physics, biology or mathematics, or ABB including chemistry and mathematics and another science. Some students are admitted through the Foundation Year, which covers basic science but also includes pharmacy-specific modules; entry through this route requires students to gain first class marks in the Foundation Year programme, as well as being successful in an interview. All MPharm applicants are interviewed, with most UK-based applicants being interviewed in person; telephone interviews are used for those who are based overseas, and for some UK candidates, but only where they can demonstrate extenuating circumstances, with all applicants through clearing being interviewed by telephone. The interviews are held on a one-to-one basis, using consistent, values-based questions, including why the applicant wishes to be a pharmacist. Applicants also participate in a team-based activity, in order to see how they operate in a team; where telephone interviews are used, the general questions are the same but some relate to team-based activities to determine how applicants might perform in a team environment. All elements of the assessment day have clear marking criteria to ensure fairness.

Standard 5: Curriculum delivery and student experience

All criteria relating to this standard are met.

While the current programme has performed well, as evidenced by the NSS scores, the high proportion of students obtaining hospital pre-registration training places, success of UEA graduates in the GPhC Registration Assessment, and the 100% employment rate of the School's MPharm graduates, the degree has some limitations, including a very full timetable. Accordingly, the School is launching a new MPharm programme from September 2018. In this programme, there will be increased integration of science and practice throughout, and an increase in active learning using, for example, workshops, problem-based learning, and team-based learning; this will provide additional time for experiential learning, as well as offering increased opportunity for students to reflect. Rather than the 16 modules constituting the current course, with four in each year, each of years 1 to 3 will comprise a single, 120-credit module. Year 4 will be split into three different modules, including the 60-credit Research Project, an 'Advanced Topics' module (20 credits) and a 40-credit module 'Managing Complexity in Patient Care'. The first year module entitled 'Preparing to Become a Pharmacy Professional' will address the transition of students to higher education, focussing on developing key transferable skills, the science underpinning the course being delivered alongside an introduction into professionalism, with science and practice teaching and assessment being integrated throughout. The modules in years 2 and 3 are entitled respectively 'Management of Common Conditions' and 'Person-centred Medicine from Bench to Bedside'. Each module in years 1 to 3 will build on the underlying science, and, in the context of various disease states, will cover in a fully integrated fashion chemistry, pharmacokinetics, pharmacodynamics, formulation science and drug delivery, pharmacology and therapeutics, clinical evidence and guidelines, care planning and clinical decision making, as well as communication with patients and with healthcare professionals. Patient-facing activities, including hospital and community placements, placements in GP practices and inter-professional learning, will be used in all years; throughout the programme, extensive use will be made of expert patients with various conditions such as diabetes and Parkinson's disease, as well as those with learning disabilities or sensory impairment; these patients will be brought into the University, where students can interact with them in a controlled environment. In light of the integrated teaching in the new programme, assessments will also be integrated, with examination questions incorporating both science and practice aspects; however, the questions will still allow members of staff to identify the areas of the programme with which students might be having difficulties. Students receive extensive feedback on their assessed work, through meeting their advisers for detailed discussions on their performance and where they might have gone wrong. All assessments of clinical competence, including OSCEs and pharmaceutical care plans will be failed if students demonstrate dangerous practice; similarly, numerous minor transgressions within clinical assessments are recorded by the module leader

and could also result in failure.

Standard 6: Support and development for students

The single criterion relating to this standcard is met.

Students are monitored throughout the course for engagement and academic achievement. Every student is assigned a personal adviser who is a member of academic staff within the School. Students meet their advisers regularly, at least three times per year, to discuss their progress and any issues that might affect their academic performance; they can make an appointment to see their personal adviser at any time. The personal advisers provide a link between the student and the other pastoral services that the University provides, including the Student Support Service and Occupational Health. Personal advisers hold tutorials with their first year advisees to discuss issues relating to subjects such as learning and studying, referencing, plagiarism, and collusion. In later years, advisers support their students in preparing their CVs and personal development planning against the School's undergraduate personal and professional development framework; throughout the course students maintain and develop their portfolios, which include many things, such as records of achievement, curriculum vitae, personal development plans, personal and professional development frameworks, evidence demonstrating skills, and reflective essays. There is a dedicated Virtual Learning Environment (VLE) Blackboard, site which is regularly updated, and a student handbook outlining all aspects of the University, course, procedures and support available. is produced annually. Support for career development is provided through the University careers service, and MyCareerCentral provides individually tailored career advice sessions, as well as group training workshops on translational skills. The School also supports career development and regularly organises inspirational career talks. Active help is provided by the School to support students with the Oriel pre-registration application process; training sessions are provided to prepare students for the assessment. Each year, the School hosts a Pre-Registration Careers fair which is well attended by both regional and national pre-registration providers, including those from the NHS, community, industry and the armed forces branches of the pharmacy profession. A bespoke mentoring programme is offered to help students to develop their career vision, with mentors coming from a pool of UEA alumni.

Standard 7: Support and development for academic staff

All criteria relating to this standard are met.

The University operate a wide range of policies to ensure that staff receive effective personal support and have adequate opportunities to learn and develop; these include a staff appraisal scheme to review regularly the work, development needs and career aspirations of members of staff in relation to the requirements of their School, Faculty or Division, and to take appropriate steps to realise their potential. This scheme provides an opportunity to review the individual's performance thus far, identify any training and development needs, and address any managerial or individual concerns at an early stage. The Centre for Staff and Educational Development (CSED) promotes and supports good practice in all aspects of developing the University's staff and provides an extensive and varied programme of workshops and seminars to support the University's objectives. Members of academic staff are expected to attend conferences pertinent to their area of research and teaching; a Faculty travel fund available, and all members of staff receive £500 per annum which can be spent on attending conferences or other educational events. An induction programme is provided for all new members of staff and the Science Faculty has recently introduced a revised induction procedure which ensures that all staff members gain an understanding of the working of the University. A School-specific induction addresses understanding the MPharm degree programme, and all non-pharmacist staff are required to shadow a community pharmacist and a hospital pharmacist to gain an understanding of the profession of pharmacy. All new members of academic staff must complete the Masters in Higher Education Practice (MA-HEP) programme to a minimum of certificate level; this allows attainment of Fellowship of the Higher Education Academy. Teacher-practitioners may also enrol on this programme, although their other commitments may extend the time required to complete it; however, the School tries to facilitate this by

planning with their employers. On commencement, each new member of staff is appointed a mentor, and all staff undertaking the MA-HEP programme will have a mentor within the School.

Standard 8: Management of initial education and training

Both criteria relating to this standard are met.

The School is configured along traditional Pharmacy School discipline lines, and comprises the four cognate areas of Pharmacy Practice, Pharmaceutics (Drug Delivery), Pharmacology, and Medicinal Chemistry. Since the 2015 interim visit, the pool of staff having senior roles, for example, in the School Executive and the Promotions Committee has been widened, and junior staff members have been given the opportunity to show leadership, for example, by being appointed as Chair of Examinations and as Director of Innovation and Engagement. Moreover, in preparation for senior management, several members of staff have undertaken leadership courses, and there have been promotions to senior, lecturer, reader and professor. Central to the management of the MPharm is the Teaching Committee chaired by the Director of Teaching and Learning (who is also the Head of Pharmacology Teaching), which reports to the Faculty Learning and Teaching Committee, which, in turn, reports to the corresponding University-level committee; the Teaching Committee comprises the Heads of Teaching in Medicines Management, Medicinal Chemistry and Drug Delivery, the Heads of each of years 1, 2, 3 and 4, the Chair and Deputy Chair of Examinations, the Placements Manager, the Student Partnership Officer and the Course Director of the Pharmacology Degree, as well as student representatives; several member of the Teaching Committee have additional roles, such as the year 3 lead also looking after Fitness to Practise, the year 4 lead also being Head of Medicinal Chemistry Teaching, and the Year 2 lead acting as Senior Adviser. There are monthly meetings of the teaching groups. Student attendance and engagement are monitored throughout the course; attendance at all teaching sessions is compulsory and is monitored through registers.

Standard 9: Resources and capacity

All criteria relating to this standard are met.

The University comprises four Faculties (Health, Science, Social Sciences and Humanities), each of which has its own budget decided by the Executive Team of the University; the School of Pharmacy lies within the Faculty of Science. The Dean of the Science Faculty, along with the Faculty Director of Finance assigns the School budget. Space charges and infrastructure costs are 'top sliced' from the School budget, so that the remainder of funding is available in its entirety for use within the School. The School budget plan, which operates on a five-year planning cycle, is calculated based upon the expected numbers of Home/EU and overseas undergraduate and postgraduate students, along with expected overhead income from research grants. For 2017/18, the income to the School will be £6.47M, of which £3.83M is apportioned to running the University. Of the remaining funds, around £2M is spent on payroll and the rest on resource for the School. The undergraduate targets for the MPharm degree are 51 Home/EU students and 15 overseas. The previous target was 100 Home/EU but the decision was made to maintain quality on the MPharm degree and to increase student numbers through the provision of a new degree in Pharmacology and Drug Discovery, with a target of 18 Home/EU students. There is also a Foundation Year for both the MPharm and the Pharmacology and Drug Discovery degrees, with a current target of 35 students. While the reduction in MPharm numbers is concerning, risk is spread across the whole Faculty, which is the budgetary unit, so that a decrease in student numbers and failure to meet targets in one School may be compensated by increased recruitment in other areas; thus the School is protected by the Faculty which has a financial surplus, although continued decline in numbers would led to a review of the situation.

The School currently has 28 full time faculty members, including five professors, two readers, eight senior lecturers, 11 lecturers and two research fellows; additionally, there is a 0.6 FTE senior lecturer in Pharmacy Practice and a 0.8 FTE lecturer in Pharmaceutical Cell Biology. The School also currently

employs ten part-time teacher-practitioners, who attend for 1-2.5 days per week depending on their contracts. The student/staff ratio is currently 14.6:1. In total, eleven staff members are UK registered pharmacists, and three have pharmacy degrees from overseas; thus, including teacher-practitioners, there is a total of 21 pharmacists within the School. Technical support across the Faculty of Science is centralised, so that the School of Pharmacy is now supported by an extensive team of teaching technicians.

There are extensive educational resources, including the Blackboard VLE, IT and computer facilities, and the library, which has a large number of electronic and print journal and book collections; online reading lists for each module link directly to the relevant electronic resource. The dispensary now has 40 individual workstations with labellers where students have full internet access and can utilise Microsoft Office, Medicines Complete and other University packages such as SPSS. The pharmacy management system allows students to create and maintain patient medication records and produce labels on University computers. The dispensary holds a wide variety of stock and a large number of the commonly used reference sources found in medicines information departments, as well as incorporating consultation rooms for communication skills sessions or individual stations for the OSCEs. Each IT workstation has a webcam included to enable communication skills sessions to be recorded by students for them to review after completion of the workshop.

Teaching laboratory space is shared with Chemistry (for pharmaceutics and medicinal chemistry) and with Biological Sciences (for pharmacology). The University has designed a new building for Science Teaching and building started on this facility in Spring 2018, with an expected opening date of September 2019. These new facilities will house dedicated laboratories for medicinal chemistry, pharmaceutics and pharmacology, all within the same building and located near to the new Julian Study Centre teaching block.

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, with four outcomes being selected for detailed discussion and a fifth, 10.1.h, being discussed briefly; the outcomes discussed in depth were 10.2.1.e, 10.2.3.b, 10.2.5.d, and 10.2.5.g (see Appendix 2). These discussions 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'). The discussions with the staff, along with scrutiny of the documentation provided confidence 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 reaccreditation 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 providers offering 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*

	Learning outcome	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)**