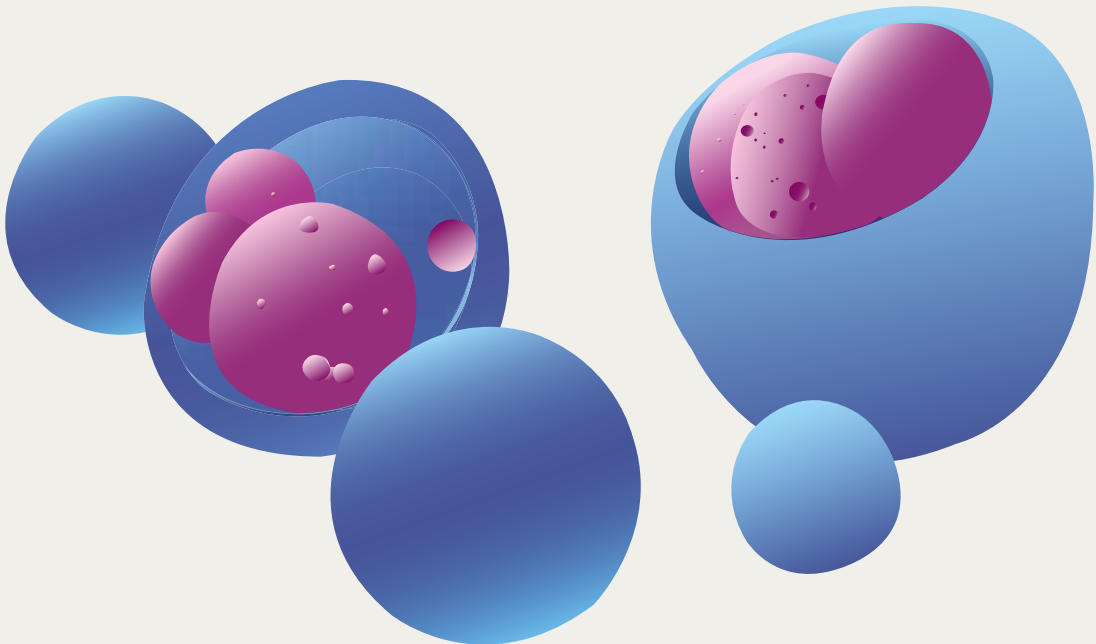


Future pharmacists

Standards for the initial education and training of pharmacists

May 2011





Contents

The delivery of education and training	6
Requirements for the initial education and training of pharmacists	7
Standard 1 – Patient and public safety	8
Standard 2 – Monitoring, review and evaluation of initial education and training	11
Standard 3 – Equality, diversity and fairness	14
Standard 4 – Selection of students <i>and trainees</i>	16
Standard 5 – Curriculum delivery and the student experience	18
Standard 6 – Support and development for students <i>and trainees</i>	23
Standard 7 – Support and development for academic staff and pre-registration tutors	25
Standard 8 – Management of initial education and training	27
Standard 9 – Resources and capacity	29
Standard 10 – Outcomes	33
Appendix 1 – Indicative syllabus	45
Appendix 2 – European requirements for the initial education and training of pharmacists	54
Appendix 3 – National and European requirements for master’s level qualifications	56
Appendix 4 – Sites for pharmacist pre-registration training	58
Further information	59

Future pharmacists

Standards for the initial education and training of pharmacists

This document provides schools of pharmacy¹ with the standards for the initial education and training of pharmacists.

The requirements for submitting a degree for accreditation are in our **accreditation and recognition manual**, which is published separately.

This document may also be of interest to prospective and current pharmacy students and pre-registration pharmacist trainees, those involved in the initial education and training of pharmacists, pharmacy professionals and members of the public.

1 The term 'school of pharmacy' is used throughout this document. It is used generically to describe the academic unit in a university with primary responsibility for delivering an accredited course. Depending on institutional structures a 'school' may be a school, department, division, faculty or other grouping. Whatever its name, for accreditation purposes a university must define the unit with primary responsibility for delivering an accredited course.

About us

The General Pharmaceutical Council (GPhC) is the regulator for pharmacists, pharmacy technicians and pharmacy premises.

It is our job to protect, promote and maintain the health, safety and wellbeing of members of the public, and in particular those members of the public who use or need the services of pharmacy professionals or the services provided at a registered pharmacy.

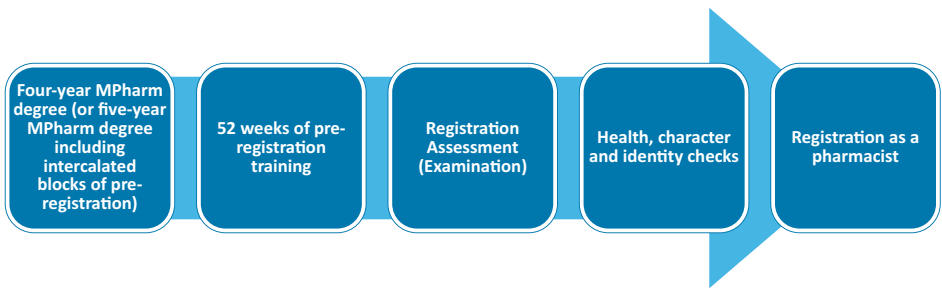
Our principal functions include:

- setting standards for conduct, ethics, proficiency, education and training, and continuing professional development (CPD);
- establishing and promoting standards for the safe and effective practice of pharmacy at registered pharmacies;
- establishing fitness to practise requirements, monitoring pharmacy professionals' fitness to practise and dealing firmly and fairly with complaints;
- approving qualifications for pharmacists and pharmacy technicians;
- maintaining a register of pharmacists, pharmacy technicians and pharmacy premises.

We will aim to ensure that regulation is fair and proportionate – that is, in line with the level of risk posed to public health, safety and wellbeing – and not over-burdensome. We want it to be flexible enough to respond to the changing demands made of the profession and to allow for innovation at the same time as maintaining high quality practice.

The delivery of education and training

The initial education and training of pharmacists in Great Britain is:



In Great Britain the four-year MPharm degree is separate from the 52-week pre-registration training with one exception: a five-year MPharm degree with two intercalated periods of pre-registration training. We expect the MPharm degree plus pre-registration training model to predominate in the short term, with an integrated degree combining academic study and pre-registration training being a future possibility. However, these standards have been written in such a way that they could support an integrated degree because we have not been prescriptive about delivery structures.

The outcomes in Standard 10 refer to outcome levels for an MPharm degree and outcome levels for pre-registration training. Unless a school of pharmacy decides to offer an integrated degree, the pre-registration outcomes are for reference and course design purposes only. As schools are not responsible currently for delivering pre-registration, anything related exclusively to pre-registration has been italicised for clarity.² It should be borne in mind, however, that even though most MPharm degrees are separate from pre-registration training, they are a preparation for it.

2 Titles of documents have also been italicised.

Requirements for the initial education and training of pharmacists

For students studying in Great Britain, there are three routes to registration^{3,4} as a pharmacist, either

- a four-year MPharm degree (part of which may be studied overseas); then
- 52 weeks of pre-registration training; and
- our Registration Assessment (an examination).

Normally, this route to registration must be completed in eight years.

Or

- a two-year part-time foundation degree in pharmacy⁵ (comprising year 1 of an MPharm degree plus work experience and study skills); then
- years 2 to 4 of an MPharm degree; then
- 52 weeks of pre-registration training; and
- our Registration Assessment (an examination).

Normally, this route to registration must be completed in nine years.

Or

- a five-year MPharm degree, including intercalated blocks of pre-registration training equalling 52 weeks; and
- our Registration Assessment (an examination).

Normally, this route to registration must be completed in eight years.

3 The maximum period for completing a route to registration may be adjusted pro rata for periods of part-time education or training and for other legitimate, documented reasons.

4 The registration process includes health, good character and identity checks.

5 This refers to accredited foundation degrees not unaccredited foundation degrees for pharmacy technicians.

Standard 1 – Patient and public safety

Standard

- 1 There must be clear procedures to address concerns about patient safety arising from initial pharmacy education and training. Concerns must be addressed immediately.

Criteria to meet this standard

- 1.1 There must be effective systems in place to ensure that students *and trainees*:
 - do not jeopardise patient safety;
 - only do tasks for which they are competent, sometimes under supervision;
 - are monitored and assessed to ensure that they always practise safely. Causes for concern should be addressed immediately;
 - have access to support for health, conduct and academic issues;
 - must not be awarded an accredited degree *or pass pre-registration training* if they might pose a risk to patients or the public. Where an accredited degree cannot be awarded, it may be possible to award another, unaccredited qualification such as a certificate, diploma or BSc;
 - understand what is and what is not professional behaviour and are familiar with the GPhC's *Code of conduct for pharmacy students (2010)* and *Standards of conduct, ethics and performance (2010)*;
 - 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;
 - undergo required health and good character checks;
 - understand that it is an offence to impersonate a pharmacist. Pharmacists are registrants of the GPhC.

Evidence required for meeting this standard

1.2 Evidence sources used to demonstrate meeting this standard include:

- fitness to practise policies;
- *premises inspection reports*;
- *pre-registration tutor assessments of trainees*.

1.3 The required evidence includes:

- evidence that the *Code of conduct for pharmacy students* and *Standards of conduct, ethics and performance* are used to promote professional conduct;
- summary outcomes of student fitness to practise hearings;
- *summary outcomes of premises inspection reports*;
- *analyses of pre-registration tutor assessments of trainees and follow-up actions*.

Guidance on meeting this standard

1.4 Anyone who teaches, supervises, counsels, employs or works with students *and trainees* has a responsibility to protect patients and the public. Where serious concerns are raised about a student *or a trainee* they must be investigated as soon as possible.

1.5 Students *and trainees* should not be put in a situation where they are asked to work beyond their competence and they must be supervised where necessary.

- 1.6 Anyone responsible for the initial education and training of pharmacists has a responsibility to share information relating to the health, conduct or performance of students *and trainees* with appropriate people. A student *or trainee* should be asked to agree to this. If they do not or cannot agree, consideration must be given to whether disclosure should take place on patient safety grounds. Patient safety is paramount at all times.
- 1.7 Students *and trainees* must not be allowed to continue education and training if they pose a risk to patients or the public.
- 1.8 By awarding an accredited degree a university is confirming that a pharmacy graduate is fit to enter pre-registration training. If pre-registration training is included in a degree, students must not be allowed to enter a training period unless they are fit to do so. The latter point applies to degrees with intercalated periods of pre-registration training as well as integrated degrees.
- 1.9 To be eligible to apply to register as a pharmacist, a trainee must have been evaluated successfully by their tutor at several points in the 52 weeks of pre-registration training. The training may be continuous or in blocks.
- 1.10 Towards the end of the 52 weeks of pre-registration training, a tutor signs off a trainee to confirm they have met the *pre-registration performance standards*.
- 1.11 School fitness to practise policies and procedures must be introduced to students as developmental tools as well as instruments of public protection.

Note

- 1.12 This standard should be read in conjunction with the GPhC's *Guidance on student fitness to practise procedures in schools of pharmacy* (2010), which has further guidance on what constitutes student fitness to practise.

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

Standard

- 2 The quality of pharmacy education and training must be monitored, reviewed and evaluated in a systematic and developmental way.

Criteria to meet this standard

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

- information about roles and responsibilities and lines of accountability;
- university information on:
 - entry requirements;
 - the quality of teaching, learning and assessment;
 - the quality of placements and other practice learning opportunities;
 - appraisal and feedback systems for students *and trainees*;
 - supervision requirements;
 - 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;

- *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;*
- *the quality and development of pre-registration tutors.*

Evidence required for meeting this standard

2.2 Evidence sources for meeting this standard include:

- evidence that the quality of initial education and training is evaluated in an integrated way (by integrated we mean an evaluation that looks at all aspects of provision);
- evidence that MPharm degrees are developed with input from external stakeholders, including patients and the public;

- quality monitoring data from universities;
- quality monitoring data from placement providers and other practice learning sources;
- GPhC accreditation reports and annual data return;
- achievement in the Registration Assessment;
- *quality monitoring data from pre-registration providers;*
- *pre-registration tutor evaluations of trainees;*
- *trainee evaluations of pre-registration tutors;*
- *premises inspection reports.*

2.3 The required evidence includes:

- entry requirements and evidence of how they support the aims and philosophy of the programme;
- outcomes of integrated evaluations of initial education and training;
- views of external stakeholders, including patients and the public, and evidence demonstrating how their views have informed course design and delivery;
- outcomes of evaluations of the quality of teaching, learning and assessment;
- outcomes of evaluations of resources and capacity;
- outcomes of evaluations of the quality of placements and other practice learning opportunities;
- outcomes of appraisal and feedback systems for students *and trainees;*
- outcomes of achievement in the Registration Assessment;
- *outcomes of pre-registration tutor evaluations of trainees;*
- *outcomes of trainee evaluations of pre-registration tutors.*

Note that the evidence above is likely to be included in evaluation processes already in place (and existing processes may well deal with more than one category of evidence).

Guidance on meeting this standard

- 2.4 Evaluation strategies must evidence 2.3.
- 2.5 Evaluation should include action which is agreed and monitored.

Pre-requisites for meeting this standard

- 2.6 University quality assurance processes are robust, rigorous and transparent.
- 2.7 Universities are open with the GPhC about matters affecting an accredited MPharm degree. It is a requirement of The Pharmacy Order 2010 that course providers assist the GPhC in its work by providing information on request.
- 2.8 Universities raise relevant issues proactively with the GPhC.

Standard 3 – Equality, diversity and fairness

Standard

- 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.

Criteria to meet this standard

- 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.

Evidence required for meeting this standard

- 3.3 Evidence that initial education and training deal with equality, diversity and fairness issues in an informed way.
- 3.4 Evidence that concerns have been addressed.
- 3.5 Evidence that staff, students *and trainees* have been trained in equality and diversity issues and are updated as necessary.

Guidance on meeting this standard

- 3.6 This standard is intended to ensure that applicants, both students *and trainees*, are not treated unfairly on grounds of:
- age;
 - disability;
 - gender reassignment;
 - marriage and civil partnership;
 - pregnancy and maternity;
 - race;
 - religion or belief;
 - sex;
 - sexual orientation;
 - other forms of discrimination.

The requirements of the Equality Act 2010 should be taken into account in this regard.

- 3.7 Equality and diversity awareness should be an integral part of initial education and training.

Standard 4 – Selection of students *and trainees*

Standard

- 4 Selection processes must be open and fair and comply with relevant legislation. Processes must ensure that students *and trainees* are fit to practise as students *or trainees* at the point of selection. Selection includes recruitment and admissions.

Criteria to meet this standard

- 4.1 Selection processes must give applicants the guidance they need to make an informed application.
- 4.2 Selection criteria must be explicit. They should include:
- meeting academic and professional entry requirements;
 - 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;
 - meeting numeracy requirements;
 - taking account of good character checks, such as Criminal Records Bureau (CRB)/Disclosure Scotland checks;
 - taking account of health checks;
 - recognising prior learning, where that is appropriate.
- 4.3 Selectors should apply the selection criteria fairly. They should be trained to do this. Training should include equality and diversity awareness.

Evidence required for meeting this standard

- 4.4 Evidence that selection processes and procedures comply with relevant legislation.
- 4.5 Evidence that the criteria in 4.2 above are being applied.
- 4.6 Evidence that staff involved in selection have been trained appropriately and are aware of relevant legislative requirements.

Guidance on meeting this standard

- 4.7 All selection requirements should be set out clearly in guidance made available to applicants. Applicants must know what will happen to them during selection, including what health and good character checks will be made.
- 4.8 Guidance should include information about the additional costs associated with making an application.
- 4.9 It must be made clear to students *and trainees* that the GPhC will carry out its own health, good character and identity checks before registering an applicant. It must be made clear to students *and trainees* that these checks relate to registration and are additional to checks made by universities and employers. It must be made clear to students *and trainees* that the GPhC may not register a student if a check is failed, even if they have passed previous checks.
- 4.10 It must be made clear to students *and trainees* that the GPhC will not offer prospective registration advice.
- 4.11 It must be made clear to students *and trainees* that an applicant can appeal against a registration refusal and that appeals must be made to the GPhC's Appeals Committee.

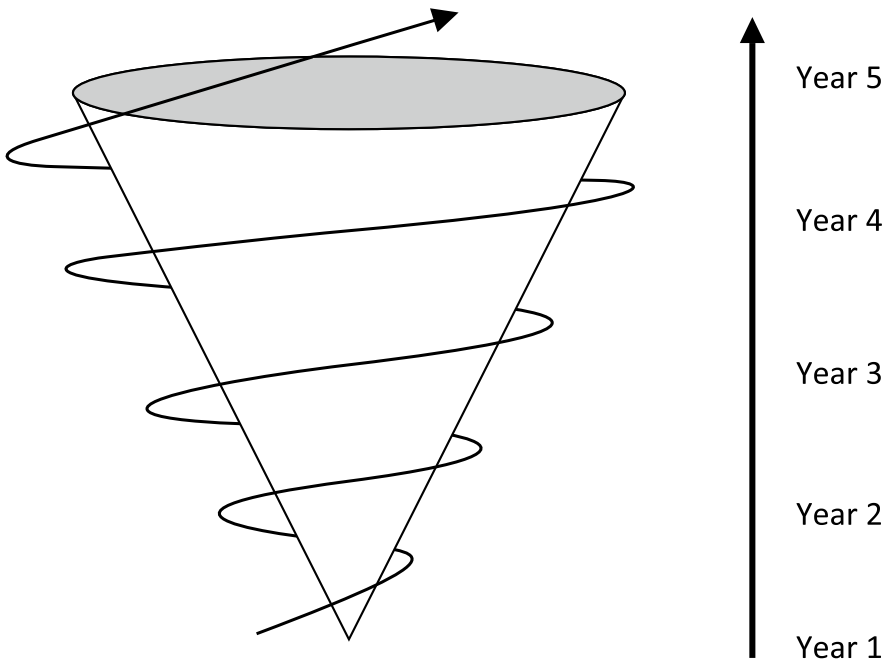
Standard 5 – Curriculum delivery and the student experience

Standard

5 The curriculum for MPharm degrees and the pre-registration scheme must deliver the outcomes in Standard 10. Most importantly, curricula must ensure that students *and trainees* practise safely and effectively. To ensure this, pass criteria must describe safe and effective practice.

Criteria to meet this standard

- 5.1 Curricula must be integrated. This does not mean necessarily that initial education and training must be delivered as a five-year MPharm degree with integrated pre-registration training, but that the component parts of education and training must be linked in a coherent way.
- 5.2 Curricula must be progressive, dealing with issues in an increasingly more complex way until the right level of understanding is reached:



Source: Harden, R.M. and Stamper, N. (1999) What is a spiral curriculum? *Medical Teacher* 21: 141–3.

- 5.3 An MPharm degree 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 current 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:
- an integrated experience of relevant science and pharmacy practice;
 - a balance of theory and practice;
 - 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. We are not suggesting that off-site placement visits are the only way to achieve this. Schools should articulate their strategy for meeting this criterion, which may include off-site placement visits, using patients, carers and other healthcare professionals in-class, and simulations.
- 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:
- diagnostic assessments;
 - formative assessments;
 - summative assessments;
 - timely feedback.

- 5.9 Academic regulations must be appropriate for a degree that is both academic and professional and which may lead to further professional training. As a general principle, all assessments must be passed. This means that condonation, compensation, trailing, extended re-sit opportunities and other remedial measures should be extremely limited, if they are permitted at all. MPharm degree academic regulations may be more stringent than university norms. This may include higher than usual pass marks for assessments demonstrating knowledge and skills essential to safe and effective pharmacy practice.
- 5.10 Marking criteria must be used for all assessments and all pass criteria must reflect safe and effective practice.
- 5.11 Patient safety must be paramount in assessments: any evidence of an assessment demonstrating unsafe practice must result in failure.
- 5.12 *A pre-registration training plan must describe how the learning outcomes for pre-registration will be delivered.*
- 5.13 *A pre-registration training plan must describe all assessments, including tutor evaluations and tutor sign-offs.*

Evidence required for meeting this standard

- 5.14 Evidence sources include:
- MPharm degree teaching and learning strategies;
 - MPharm degree assessment strategies;
 - pharmacy research strategies;
 - assessment criteria;
 - academic regulations;
 - MPharm degree external examiners' reports;
 - reports of MPharm degree accreditation visits;

- internal university quality reports;
- evaluation and feedback from students, *trainees and tutors*;
- national peer-reviewed research assessment exercises;
- Registration Examination progression data;
- *reports of pre-registration training site visits*;
- *pre-registration training plans*.

5.15 The required evidence includes:

- evidence of the impact of teaching and learning strategies on course delivery and the student experience;
- evidence of the impact of assessment strategies on course delivery and the student experience;
- evidence of the impact of current research on course design;
- evidence that assessment pass criteria reflect safe and effective practice;
- evidence that issues raised during accreditation visits have been addressed;
- evidence that evaluation and feedback from all sources has been acted on;
- evidence that, where appropriate, reasonable adjustments have been made to course/*training* delivery for students/*trainees*;
- evidence that attrition rates are understood;
- evidence that Registration Assessment progression data has been used to inform course design;
- *evidence that pre-registration progression data has been used to inform course design*.

Note that the evidence listed above is likely to be included in evaluation processes already in place (and existing processes may well deal with more than one category of evidence).

Guidance on meeting this standard

- 5.16 Assessment and feedback systems should be embedded in all five years of initial education and training.
- 5.17 There should be a range of teaching and learning methods to deliver the outcomes in Standard 10.
- 5.18 There should be a range of assessment methods to test all the outcomes in Standard 10.
- 5.19 Links between diagnostic, formative and summative assessments must be made clear to students *and trainees*.
- 5.20 Links between assessments and feedback must be made clear to students *and trainees*. Feedback must be given in time for it to be used effectively.
- 5.21 There should be deadlines for assessments to be marked and for feedback to be given. Action should be taken if deadlines are not met.
- 5.22 Where appropriate, reasonable adjustments must be made to curriculum delivery to help students *and trainees* with special and specific needs meet learning outcomes. Teaching, learning and assessment can be modified for this purpose but learning outcomes cannot.

Standard 6 – Support and development for students *and trainees*

Standard

- 6 Students *and trainees* must be supported to develop as learners and professionals during their initial education and training.

Criteria to meet this standard

- 6.1 A range of mechanisms must be in place to support students *and trainees* to develop as learners and professionals.

Evidence required for meeting this standard

- 6.2 Evidence of appropriate personal and professional development, such as:
- student CPD portfolios;
 - *trainee CPD portfolios*;
 - *tutor evaluations of trainees*;
 - *trainee evaluations of tutors*.

Guidance on meeting this standard

- 6.3 Students *and trainees* must work with a range of academic and professional role models. The range must include:
- academic staff in pharmacy, including practice staff, scientists, researchers and support staff;
 - *pre-registration tutors*;
 - other healthcare professionals.
- 6.4 Students must have access to support for their academic and general welfare needs. Support must be readily available to students. If students are *working off-site or trainees are working away from their normal pre-registration training premises*, appropriate support mechanisms must be in place.

- 6.5 Students *and trainees* should have access to career advice.
- 6.6 If it is no longer possible for students to continue on an MPharm, they should be told what other options are available to them by their school of pharmacy, in particular if they are able to transfer to other, non-accredited courses such as a certificate, diploma or BSc.
- 6.7 *If it is no longer possible for a trainee to continue in the pre-registration scheme, they should be told what options are available to them.*

Standard 7 – Support and development for academic staff and pre-registration tutors

Standard

- 7 Anyone delivering initial education and training should be supported to develop in their professional role.

Criteria to meet this standard

- 7.1 There must be a range of mechanisms in place to support anyone delivering initial education and training to develop in their professional role.
- 7.2 Induction programmes are provided for tutors and university staff as appropriate. There should also be induction programmes for non-pharmacists working on MPharm degrees.
- 7.3 Everyone involved in delivering the curriculum should have:
- effective supervision;
 - an appropriate and realistic workload;
 - effective personal support;
 - mentoring;
 - time to learn;
 - continuing professional development opportunities.
- 7.4 *Tutors should have an identified source of peer support.*

Evidence required for meeting this standard

- 7.5 Evidence that staff appraisal systems address performance issues (anonymised).
- 7.6 Evidence that staff development systems affect course delivery.

Guidance on meeting this standard

- 7.7 Staff appraisal schemes should take account of the needs of all categories of staff, including practice staff and part-time staff.
- 7.8 Staff development should be in place for non-pharmacist staff to help them understand how their expertise contributes to the initial education and training of pharmacists and how it can best be delivered in a pharmaceutical context.

Standard 8 – Management of initial education and training

Standard

- 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.

Criteria to meet this standard

- 8.1 All education and training will be supported by a defined management plan with:
- a schedule of responsibilities;
 - defined structures and processes to manage the delivery of education and training.

Evidence required for meeting this standard

- 8.2 Evidence sources should include:
- management plans. For students this will be course documents. *For trainees it will be at least a Pre-registration Training Plan;*
 - evidence of working arrangements between stakeholders, such as clear plans and service-level agreements for certain activities;
 - university quality monitoring processes and the outcomes of these processes;
 - *pre-registration tutor evaluations of trainees and trainee evaluations of pre-registration tutors.*
- 8.3 Required evidence includes:
- outcomes of university quality management process affecting pharmacy;
 - service-level agreements or other agreements between stakeholders;
 - evaluations of the relationship between stakeholders and actions taken to address issues;
 - *evaluations of pre-registration training.*

Guidance on meeting this standard

8.4 Systems and structures should be in place to manage the learning of students in the academic environment. They must take account of:

- access to and availability of suitable learning facilities;
- the balance between taught components, directed learning and student/*trainee* self-study;
- student attendance, particularly minimum requirements and what is compulsory;
- mechanisms to ensure that structured, off-site learning is quality assured and linked to specified areas of the curriculum and outcomes. This must include the quality assurance of placements and placement staff.

8.5 Systems and structures should be in place to manage the learning of students *and trainees* in practice. They must take account of:

- placement capacity and sustainability;
- allocation of students to placements;
- management of student progress through placements;
- mechanisms for data collection to support audit of placements;
- access to and availability of suitable learning facilities;
- managing and monitoring attendance;
- ways in which students *and trainees* can communicate with tutors and staff when they are off-site.

Standard 9 – Resources and capacity

Standard

9 Resources and capacity are sufficient to deliver outcomes.

Criteria to meet this standard

9.1 There must be:

- robust and transparent mechanisms for securing an appropriate level of resource for delivering an accreditable MPharm degree;
- 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:
 - 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;
 - sufficient numbers of pharmacists to act as tutors and professional mentors at university *and in pre-registration*. Not all personal tutors must be pharmacists;
 - pharmacists who are leaders in the profession, the school and their university, who can influence school and university policy relevant to pharmacy;
 - non-pharmacist academics who can influence school and university policy relevant to pharmacy;
 - staff who are sufficiently experienced to supervise research. It would be unusual for anyone to supervise research at a particular academic level unless they had previously 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;
 - science academics who understand the relevance of their discipline to pharmacy and deliver their area of expertise in a pharmaceutical context;
 - academic pharmacists and other experienced MPharm degree staff who act as mentors to non-pharmacist colleagues;

- *pre-registration tutors who meet the GPhC's standards for pre-registration tutors;*
- career pathways in universities for all staff teaching on MPharm degrees, including pathways for practice staff;
- clear lines of authority and responsibility for the strategic organisation and day-to-day management of placements;
- training and ongoing support for all non-pharmacists involved in the delivery of MPharm degrees which must help them understand:
 - the relevance of their work to pharmacy;
 - how to deliver their area of expertise in a pharmaceutical context;
- appropriate learning resources;
- accommodation and facilities that are fit for purpose;
- *pre-registration premises which meet the GPhC's standards for pre-registration premises.*

Evidence required for meeting this standard

9.2 Required evidence includes:

- evidence that there are mechanisms for securing sufficient levels of resource to deliver an MPharm degree to the required standard;
- evidence that the staffing profile can support the delivery of the course and the student experience;
- evidence that the staffing profile includes pharmacists who are leaders in the profession, the school and their university, who can influence school and university policy relevant to pharmacy;
- evidence that the staffing profile includes non-pharmacists who can influence school and university policy relevant to pharmacy;

- evidence that there are career structures for all categories of staff, including practice staff;
- evidence that the staffing profile includes a critical mass of pharmacists – registrants of the GPhC – sufficient to ensure that the course is focused on the profession of pharmacy in Great Britain;
- evidence that all staff supervising student research are appropriately qualified to do so. This must include criteria for eligibility to supervise research at the required level;
- evidence that there is recognised training and ongoing support for all non-pharmacist staff to ensure that their contribution to an accredited course is orientated to pharmacy;
- evidence that learning resources are fit for purpose;
- evidence that accommodation and facilities are fit for purpose;
- *evidence that pre-registration tutors and premises meet the GPhC's standards.*

Guidance on meeting this standard

- 9.3 Initial education and training providers exercise an appropriate level of autonomy over pharmacy resources to deliver an MPharm degree to the required standard and in an appropriate learning environment. The precise nature of the autonomy of pharmacy and its senior managers will be determined by the institutional context in which pharmacy finds itself. However, whatever the context, there must be robust and transparent ways of securing resources for pharmacy.
- 9.4 Initial education and training environments must support students *and trainees* to achieve the outcomes in Standard 10.

9.5 These standards describe the types of staff required to deliver an MPharm degree *and pre-registration training. All pre-registration tutors must be pharmacists* and some MPharm degree staff must be pharmacists. It is important to remember what the legal definition of a pharmacist is:

‘A person practises as a pharmacist or a pharmacy technician if, whilst acting in the capacity of or purporting to be a pharmacist or a pharmacy technician, that person undertakes any work or gives any advice in relation to the preparation, assembly, dispensing, sale, supply or use of medicines, the science of medicines, the practice of pharmacy or the provision of healthcare.’ (The Pharmacy Order 2010)

In a university context, this definition is not restricted to staff who teach pharmacy practice but includes staff involved in ‘the provision of healthcare’ and ‘the science of medicines’ among other things. This definition means that staff other than teacher-practitioners or pharmacy practice staff may be registered as pharmacists.

Note: The GPhC does not have a non-practising registration category. Membership of other organisations is not equivalent to registration as a pharmacist.

Standard 10 – Outcomes

Outcomes for the initial education and training of pharmacists

10.1 Expectations of a pharmacy professional

Outcomes	MPharm	Pre-reg*
Note: Pre-registration learning outcomes are for reference only if a four-year MPharm is being delivered.		
a. Recognise ethical dilemmas and respond in accordance with relevant codes of conduct	Shows how	Does
b. Recognise the duty to take action if a colleague's health, performance or conduct is putting patients or the public at risk	Knows how	Knows how
c. Recognise personal health needs, consult and follow the advice of a suitably qualified professional, and protect patients or the public from any risk posed by personal health	Does	Does
d. Apply the principles of clinical governance in practice	Knows how	Does
e. Demonstrate how the science of pharmacy is applied in the design and development of medicines and devices	Shows how	Knows how
f. Contribute to the education and training of other members of the team, including peer review and assessment	Shows how	Does
g. Contribute to the development of other members of the team through coaching and feedback	Knows how	Shows how

*Pre-registration training.

Outcomes	MPharm	Pre-reg*
h. Engage in multidisciplinary team working	Knows how	Does
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

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

*Pre-registration training.

Outcomes	MPharm	Pre-reg*
g. Contribute to research and development activities to improve health outcomes	Knows how	Knows how
h. Provide evidence-based medicines information	Shows how	Does

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

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

*Pre-registration training.

Outcomes	MPharm	Pre-reg*
h. Optimise treatment for individual patient needs in collaboration with the prescriber	Shows how	Does
i. Record, maintain and store patient data	Shows how	Does
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 that safe and effective systems are in place to manage the risk inherent in the practice of pharmacy and the delivery of pharmaceutical services

Outcomes	MPharm	Pre-reg*
a. Ensure quality of ingredients to produce medicines and products	Knows how	Shows how
b. Apply pharmaceutical principles to the formulation, preparation and packaging of products	Shows how	Shows how
c. Use pharmaceutical calculations to verify the safety of doses and administration rates	Does	Does
d. Develop quality management systems including maintaining appropriate records	Shows how	Shows how
e. Manage and maintain quality management systems including maintaining appropriate records	Shows how	Does

*Pre-registration training.

Outcomes		MPharm	Pre-reg*
f.	Procure and store medicines and other pharmaceutical products working within a quality assurance framework	Knows how	Does
g.	Distribute medicines safely, legally and effectively	Knows how	Does
h.	Dispose of medicines safely, legally and effectively	Knows how	Does
i.	Manage resources in order to ensure work flow and minimise risk in the workplace	Knows how	Shows how
j.	Take personal responsibility for health and safety	Does	Does
k.	Work effectively within teams to ensure that safe and effective systems are being followed	Knows how	Does
l.	Ensure the application of appropriate infection control measures	Shows how	Does
m.	Supervise others involved in service delivery	Knows how	Does
n.	Identify, report and prevent errors and unsafe practice	Shows how	Does
o.	Procure, store and dispense and supply veterinary medicines safely and legally	Knows how	Knows how

*Pre-registration training.

10.2.4 Working with patients and the public

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

*Pre-registration training.

10.2.5 Maintaining and improving professional performance

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

*Pre-registration training.

Context

10.3 Students *and trainees* must be able to:

- study and train safely and effectively;
- study and train ethically and lawfully;
- understand and apply biomedical and pharmaceutical science principles, method and knowledge;
- understand and apply psychological and social science principles, method and knowledge;
- understand and apply population and improvement science principles, method and knowledge.

10.4 The outcomes defined in this section are practical and describe safe and effective pharmacy practice. To be safe and effective, the practice of pharmacy must be underpinned by relevant and up-to-date science. Sound science is the basis of effective pharmacy.

10.5 The practice of pharmacy requires pharmacists to make decisions in complex and unpredictable situations, sometimes in the absence of complete data. Pharmacists need to communicate with patients and the public clearly; often they will need to explain complicated ideas in a way that is understandable to patients and carers. Equally, pharmacists need to understand the complexities of patients' circumstances insofar as they are relevant to their use of medicines or other behaviours relevant to personal health and wellbeing.

10.6 As professionals, pharmacists must act on their own initiative and take personal responsibility for what they do. Pharmacists need to have the independent learning ability required for continuing professional development in order to maintain a critical awareness of current practice. To prepare students for this, the initial education and training of pharmacists is at master's level (as defined by the UK's Quality Assurance Agency (QAA)).

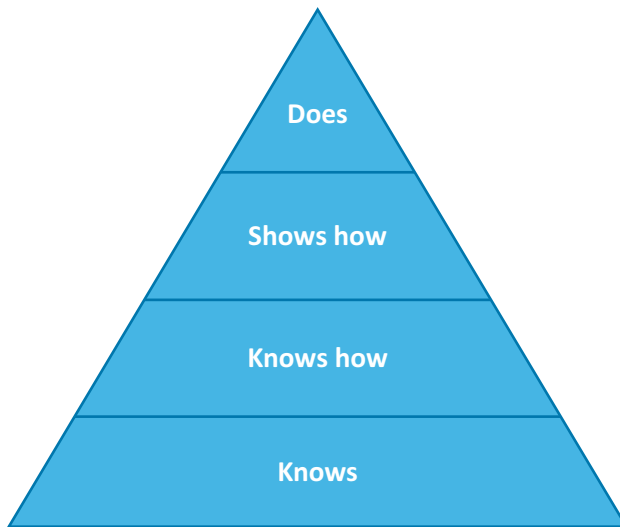
10.7 The initial education and training of pharmacists is extensive and rigorous. After five years it is realistic to expect a person to be competent but not yet proficient or expert.



10.8 Recent registrants develop their core competences both during and then beyond their initial educational experience. The first few years after graduation are crucial in developing the personal patterns of professional practice central to being a safe, independent and proficient practitioner.

Describing and assessing outcomes

10.9 The outcome levels in Standard 10 have been derived from a competence and assessment hierarchy, known as Miller's triangle. Although Miller developed the triangle for clinical work, it can be applied to science too.



Source: Miller, G.E. (1990) The assessment of clinical skills/competence/performance. *Acad Med* 65: 563–7.

10.10 As what is being assessed at each of the four levels is different, the assessment types associated with the levels are different too, although there will be some overlap.

- **Level 1 – Knows.** Knowledge that may be applied in the future to demonstrate competence. Assessments may include essays, oral examinations and multiple choice questions.
- **Level 2 – Knows how.** Context-based tests – knows how to use knowledge and skills. Assessments may include essays, oral examinations, multiple choice questions and laboratory books.
- **Level 3 – Shows how.** A student *or trainee* is able to demonstrate that they can perform in a simulated environment or in real life. Assessments may include objective structured clinical examinations (OSCEs), simulated patient assessments, designing, conducting and reporting an experiment, dispensing tests and taking a patient history.

- **Level 4 – Does.** Acting independently and consistently in the complex situation of an everyday or familiar context. Evidence for this level is showing in this context that one is able to demonstrate the outcomes in a complex everyday situation repeatedly and reliably. Assessments may include OSCEs, taking a patient history *and a trainee demonstrating things in the pre-registration performance standards repeatedly, accurately and safely. The trainee needs to be observed doing these things by their tutor and others.*

Note that these levels do not equate to years of study.

Teaching and learning

10.11 A curriculum should not be formulaic and should include a variety of teaching and learning methods. Typically, teaching and learning methods should result in:

- learning based on experience that provides clinical education in a range of practices and procedures;
- learning based on experience that provides scientific education in a range of practices and procedures;
- learning based on experience that provides education in inter-professional practices and procedures with other healthcare professionals;
- learning that enables the demonstration of behaviours, attitudes and values set out in the GPhC's *Code of conduct for pharmacy students and Standards of conduct, ethics and performance*;
- learning including research and research methods to ensure that students meet the research requirements for master's degrees in the QAA's qualifications frameworks;
- learning that integrates theory and practice opportunities for developing the skills students/*trainees* need to become self-directed learners;

- opportunities to reflect on learning and practice and to discuss issues with staff and peers. This should include activities such as pharmacist CPD;
 - opportunities for students to develop specialist knowledge, for example veterinary/industrial pharmacy or recent advances in science relevant to pharmacy.
- 10.12 MPharm degree students may study abroad for specified periods if the period abroad is mapped onto relevant learning outcomes and the school knows what a student will be doing in advance. The maximum period of study overseas permissible is two years.
- 10.13 *Pre-registration trainee pharmacists may spend up to 13 weeks of their 52 weeks of training in another EU member state.*

The link between teaching and learning and assessment

- 10.14 The link between teaching and learning and assessment must be explicit. Assessment must complement teaching and learning. Assessment must test competence and the achievement of the outcomes in this standard. Ensuring this will be a central feature of our quality assurance processes.

Devolution

- 10.15 The GPhC's register covers Great Britain. By country of residence the split is 80%+ in England, 10% in Scotland, 5% in Wales, with the remainder overseas. As students may work in any country, they must be made aware of the similarities and differences in the provision of healthcare in the countries of Great Britain.

Appendix 1 – Indicative syllabus

A1.1 How medicines work

Therapeutics

- Routes of administration
- New therapeutic advances
- Infection control
- Complementary therapies
- Clinical therapeutic uses of drugs

Applied Physical, Chemical and Biological sciences

- (Bio)Analytical principles and methods
 - pharmaceutical analytical instrumentation
 - scope and limitations of analytical techniques
 - advanced instrumental methods
 - drug identification
- Drug design and discovery
 - drug targets
 - structure: activity relationships
 - molecular modelling
- Cell and molecular biology
 - prokaryotic and eukaryotic cell structure and function
 - major cell components
 - cell signalling
 - membrane transport

- cell biochemistry: biosynthetics and metabolism
- cellular genetics
- Microbiology
 - classification and identification
 - bacteria, fungi, viruses, protozoa, helminths
 - replication
 - pathogenicity and virulence
 - zoonoses
- Immunology
 - transplantation
 - vaccination
 - diagnostics
- Pharmaceutical chemistry
 - chemical structure, bonding and nomenclature
 - chemical functional groups and reactivity
 - drug synthesis
 - thermodynamics and chemical kinetics
 - physicochemical properties of drug molecules
 - sources and purification of medicinal substances, including natural products

Pharmacology, pharmacokinetics and pharmacodynamics

- Contraindications, adverse reactions and drug interactions
- Absorption, distribution, metabolism and excretion (ADME)

- Pharmacokinetic modelling
- Bioavailability and bioequivalence
- 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 and engineering science

- Biotechnology
 - biotechnological use of microorganisms
 - recombinant DNA technology
 - transgenic animals
 - tissue engineering
- Manufacturing methods
- Quality assurance processes, including raw materials and products
- Sterilisation and asepsis
- Environmental control in manufacturing

Formulation and material science

- Materials used in formulations and devices
- Dosage forms
- Formulation principles

- Biopharmaceutics, developmental pharmaceuticals, pre-formulation and formulation studies
- Design and standardisation of medicines
- Microbiological contamination
- Contamination control
- Product stability
- Medical devices

A1.2 How people work

Normal and abnormal structure and function

- Nutrition
- Anatomy and physiology
 - physiological regulation and homeostasis
 - neural communication and control
 - clinical immunology: autoimmune disease; hypersensitivity reactions
- Pathology
- Infectious diseases and infective processes
- Wound repair

Sociology

- Social and behavioural science
- Drug misuse
- Drugs in sport

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: the National Health Service in all of Great Britain, including the NHS, NHS Scotland and NHS Wales; the Department of Health, Scottish Government Health Department and Welsh Assembly Government Department for Health and Social Services; government priorities
- Other professionals
- Healthcare systems
- Veterinary pharmacy

Evidence-based practice

- Health information systems/resources
- Health policy and (pharmaco)economics
- Health-related quality of life
- Pharmacovigilance

Professional regulation

- Legislation
- Professional ethics and fitness to practise
- Sale and supply of medicines
- Continuing professional development
- 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

- Standard operating procedures (SOPs)
- Research methodology/research ethics

- Risk and 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
- Therapeutic drug monitoring

Workplace regulation

- Health and safety
- Sexual boundaries
- Independent Safeguarding Authority
- Data protection
- Freedom of Information Act (FOIA)
- Consumer protection, including complaints procedures

A1.4 Core and transferable skills

Professionalism

Research (including research methods)

Critical appraisal

- Audit and learning from errors
- Analysis of evidence
- Evaluation of the literature

Problem solving

- Study skills
- Team-working skills
- Integrating knowledge from multiple sources

Clinical decision-making

- Leadership skills

Accurate record keeping

Reflective practice (including continuing professional development)

Effective communication

- Interpersonal skills
- Medical terminology

Interpret and interrogate clinical/scientific data

Analyse and use numerical data

Pharmaceutical numeracy

Literature searching

A1.5 Attitudes and values

See the *Code of conduct for pharmacy students* (2010) and *Standards of conduct, ethics and performance* (2010).

Appendix 2 – European requirements for the initial education and training of pharmacists

Directive 2005/36/EC of the European Parliament and of the Council on the recognition of professional qualifications includes requirements for the initial education and training of pharmacists. The requirements constitute the Minimum Training Requirement (MTR). They include:

Section 7 – Pharmacist

Article 44 – Training as a pharmacist

2. Evidence of formal qualifications as a pharmacist shall attest to training of at least five years' duration, including at least:
 - (a) four years of full-time theoretical and practical training at a university or at a higher institute of a level recognised as equivalent, or under the supervision of a university;
 - (b) six-month traineeship in a pharmacy which is open to the public or in a hospital, under the supervision of that hospital's pharmaceutical department.
3. Training for pharmacists shall provide an assurance that the person concerned has acquired the following knowledge and skills:
 - (a) adequate knowledge of medicines and the substances used in the manufacture of medicines;
 - (b) adequate knowledge of pharmaceutical technology and the physical, chemical, biological and microbiological testing of medicinal products;
 - (c) adequate knowledge of the metabolism and the effects of medicinal products and of the action of toxic substances, and of the use of medicinal products;
 - (d) adequate knowledge to evaluate scientific data concerning medicines in order to be able to supply appropriate information on the basis of this knowledge;
 - (e) adequate knowledge of the legal and other requirements associated with the pursuit of pharmacy.

Article 45 – Pursuit of the professional activities of a pharmacist

2. The Member States shall ensure that the holders of evidence of formal qualifications in pharmacy at university level or a level deemed to be equivalent, which satisfies the provisions of Article 44, are able to gain access to and pursue at least the following activities, subject to the requirement, where appropriate, of supplementary professional experience:
- (a) preparation of the pharmaceutical form of medicinal products;
 - (b) manufacture and testing of medicinal products;
 - (c) testing of medicinal products in a laboratory for the testing of medicinal products;
 - (d) storage, preservation and distribution of medicinal products at the wholesale stage;
 - (e) preparation, testing, storage and supply of medicinal products in pharmacies open to the public;
 - (f) preparation, testing, storage and dispensing of medicinal products in hospitals;
 - (g) provision of information and advice on medicinal products.

The syllabus is at Annex V.6. – Pharmacist, 5.6.1 Course of training for pharmacists.

Appendix 3 – National and European requirements for master’s level qualifications

The UK is a signatory to the Bologna Declaration. The Declaration produced a number of common actions which have been designed to harmonise higher education qualifications across Europe. Because it is a signatory, the UK has agreed to operate a degree system including bachelor’s, master’s and doctoral qualifications.

MPharm degrees are compliant with the requirements of:

- the *Framework of Qualifications for the European Higher Education Area*;
- the Quality Assurance Agency’s *Framework for higher education qualifications in England, Wales and Northern Ireland*;
- the Scottish Credit and Qualifications Framework Partnership’s *Scottish Credit and Qualifications Framework*.

Framework for Higher Education Qualifications in England, Wales and Northern Ireland

Descriptor for a higher education qualification at Level 7: Master’s degree

The descriptor provided for this level of the framework is for any master’s degree which should meet the descriptor in full. This qualification descriptor can also be used as a reference point for other Level 7 qualifications, including postgraduate certificates and postgraduate diplomas.

Master’s degrees are awarded to students who have demonstrated:

- a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study or area of professional practice;
- a comprehensive understanding of techniques applicable to their own research or advanced scholarship;
- originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline;

- conceptual understanding that enables the student:
 - to evaluate critically current research and advanced scholarship in the discipline;
 - to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

Typically, holders of the qualification will be able to:

- deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences;
- demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level;
- continue to advance their knowledge and understanding, and to develop new skills to a high level.

And holders will have:

- the qualities and transferable skills necessary for employment requiring:
 - the exercise of initiative and personal responsibility;
 - decision-making in complex and unpredictable situations;
 - the independent learning ability required for continuing professional development.

Appendix 4 – Sites for pharmacist pre-registration training

Pre-registration training may take place on any site approved by the GPhC. These include:

- community pharmacies;
- NHS hospital pharmacies;
- primary care trusts;
- schools of pharmacy with an accredited MPharm degree;
- the pharmaceutical industry;
- prison pharmacies;
- mental health trusts;
- private hospitals;
- registered pharmacies engaged solely in the supply of animal and agricultural products.

At least 26 weeks of the 52 weeks of pre-registration training must be patient-facing.

Further information

This document has been written for professional educators and trainers. There are other documents explaining these standards and requirements which have been written for different audiences.

If you are a pre-registration trainee or have applied to enter the pre-registration scheme, the most useful document for you is the *Pre-registration Training Manual for Trainees*. The manual contains the standards you have to meet and also information on the Registration Assessment.

If you are a pre-registration tutor, or are thinking of applying to become a tutor, the most useful document for you is the *Pre-registration Training Manual for Tutors*. It tells you what you have to do as a tutor and how to support a trainee.

You can find these documents at www.pharmacyregulation.org.

If you would like to speak to someone about the pre-registration scheme or the Registration Examination, contact prereg@pharmacyregulation.org.

Other standards and guidance

We have published a document for non-EEA pharmacists wanting to register in Great Britain called *Education and training standards for non-EEA pharmacists wanting to register in Great Britain*.

Once registered, pharmacy professionals must meet our *Standards of conduct, ethics and performance* and *Standards for continuing professional development*.

You can find these documents at www.pharmacyregulation.org.

Reference documents

Accreditation and Recognition of Pharmacy Technician programmes (General Pharmaceutical Council (GPhC), 2011)

Clear sexual boundaries between healthcare professionals and patients: guidance for fitness to practise panels (Council for Healthcare Regulatory Excellence (CHRE), 2008)

Clear sexual boundaries between healthcare professionals and patients: responsibilities of healthcare professionals (CHRE, 2008)

Code of conduct for pharmacy students (GPhC, 2010)

Code of practice for the assurance of academic quality and standards in higher education (Quality Assurance Agency (QAA), 2004–10)

Dimensions of quality (Gibbs, G., Higher Education Academy, 2010, www.hea.ac.uk/assets/documents/evidence_informed_practice/Dimensions_of_Quality.pdf)

Directive 2005/36/EC of the European Parliament and of the Council on the recognition of professional qualifications

Fitness to practise procedures for pharmacy students in UK universities: a literature review (Schafheutle, E.I. et al. on behalf of the Royal Pharmaceutical Society of Great Britain (RPSGB), 2009)

Framework for higher education qualifications in England, Wales and Northern Ireland (QAA, 2008)

Framework of Qualifications for the European Higher Education Area (www.ond.vlaanderen.be/hogeronderwijs/bologna/qf/overarching.asp)

From pharmacy education into pre-registration training (Willis, S. et al., Centre for Pharmacy Workforce Studies (CPWS), The Workforce Academy, School of Pharmacy and Pharmaceutical Sciences, University of Manchester, Pharmacy Practice Research Trust (PPRT), 2007)

Good character assessment framework template (contact GPhC)

Guidance on student fitness to practise procedures in schools of pharmacy (GPhC, 2010)

Health assessment framework template (contact GPhC)

Healthcare professional education and training: how does pharmacy in Great Britain compare? (Wright, D.J. et al., University of East Anglia for the RPSGB, 2006)

Higher education credit framework for England: guidance on academic credit arrangements in higher education in England (QAA, 2008)

IELTS Guide for educational institutions, governments, professional bodies and commercial organisations (International English Language Testing System (IELTS), 2009)

Institutional review of higher education institutions in England and Northern Ireland, operational description (QAA, 2010)

Learning about sexual boundaries between healthcare professionals and patients: a report on education and training (CHRE, 2008)

Learning from innovation in pharmacy education (PPRT, 2007)

Making pharmacy education fit for the future, Report of the Pharmacy Education R&D Reference Group (RPSGB, 2004)

MPharm programmes: where are we now? (Wilson, K. et al., Aston University Pharmacy Practice Research Group, PPRT, 2005)

MPharm student code of conduct: a literature review (Schafheutle, E.I. et al. on behalf of the RPSGB, 2009)

Pharmacy in England: building on strengths – delivering the future (HM Government/Department of Health, The Stationery Office, 2008)

The Pharmacy Order 2010

Pharmacy undergraduate students: career choices and expectations across a four-year degree programme (Wilson, K. et al., Aston University Pharmacy Practice Research Group, PPRT, 2006)

Pre-registration Trainee Workbook (GPhC, annual) (includes Pre-registration performance standards and Registration Examination Syllabus)

Pre-registration Tutor Workbook (GPhC, annual)

Scottish Credit and Qualifications Framework (Scottish Credit and Qualifications Framework Partnership, www.scqf.org.uk/The%20Framework/)

Sexual boundary violations by health professionals – an overview of the published empirical literature (Halter, M. et al., CHRE, 2007)

Standards of conduct, ethics and performance (GPhC, 2010)

Studying pharmacy: who, when, how, why? What next? (Willis, S. et al., CPWS, The Workforce Academy, School of Pharmacy and Pharmaceutical Sciences, University of Manchester, PPRT, 2006)

Work, employment and the early careers of cohort pharmacists (Willis, S. et al., CPWS, The Workforce Academy, School of Pharmacy and Pharmaceutical Sciences, University of Manchester, PPRT, 2009)

Working lives of pre-registration trainees (Willis, S. et al., CPWS, The Workforce Academy, School of Pharmacy and Pharmaceutical Sciences, University of Manchester, PPRT, 2008)

Websites

British Pharmaceutical Students' Association (BPSA): www.bpsa.co.uk

Council for Healthcare Regulatory Excellence (CHRE): www.chre.org.uk

Council of University Heads of Pharmacy Schools (CUHOP): www.cuhop.ac.uk

European Commission/European Union (EC/EU): <http://ec.europa.eu> and document service at <http://eur-lex.europa.eu>

General Pharmaceutical Council (GPhC): www.pharmacyregulation.org

International English Language Testing System (IELTS): www.ielts.org

Modernising Pharmacy Careers (MPC): www.mee.nhs.uk/programme_boards/modernising_pharmacy_careers_p.aspx

National Recognition Information Centre for the United Kingdom (UK NARIC): www.naric.org.uk

Office of the Independent Adjudicator (OIA): www.oiahe.org.uk

Pharmaceutical Society of Northern Ireland (PSNI): www.psni.org.uk

Pharmacy Practice Research Trust (PPRT): www.pprrt.org.uk/home/Home.aspx

Quality Assurance Agency (QAA): www.qaa.ac.uk

Royal Pharmaceutical Society (RPS): www.rpharms.com

UK Border Agency (UKBA): www.ukba.homeoffice.gov.uk

**General
Pharmaceutical
Council**

129 Lambeth Road
London SE1 7BT

T 020 3365 3400
F 020 3365 3401

www.pharmacyregulation.org