Reaccreditation of a Master of Pharmacy degree course (MPharm)

Queen’s University Belfast

Report of a reaccreditation event, 8-10 May 2012

Introduction

The General Pharmaceutical Council (GPhC) is the statutory regulator for pharmacists and pharmacy technicians and is the accrediting body for pharmacy education in Great Britain. The GPhC is responsible for setting standards and approving education and training courses which form part of the pathway towards registration for pharmacists. The UK qualification required as part of the pathway to registration as a pharmacist is a GPhC-accredited Master of Pharmacy degree course (MPharm). The GPhC’s right to check the standards of pharmacy qualifications leading to annotation and registration as a pharmacist is 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. Master of Pharmacy degrees in Northern Ireland are jointly accredited by the General Pharmaceutical Council (GPhC) and the Pharmaceutical Society of Northern Ireland (PSNI). The PSNI is the regulatory body for pharmacists in Northern Ireland and has adopted the GPhC’s accreditation criteria. Joint accreditation allows for graduating students to be eligible to use their qualification as the route to registration as a Pharmacist with both the GPhC and/or the PSNI, thus allowing them to work throughout the UK. Accreditation is carried out as a single event, attended by an accreditation team representing each regulatory body. A joint recommendation on accreditation is reached and is put forward for approval to the GPhC’s Council and the PSNI Education Committee.

This accreditation event was carried out in accordance with the GPhC’s 2011 MPharm Accreditation Methodology and the course was reviewed against the GPhC’s 2011 education standards ‘Future Pharmacists: Standards for the initial education and training of pharmacists’.

Background

The MPharm at the Queen’s University Belfast is offered through the School of Pharmacy, which is one of four schools in the Faculty of Medicine, Health and Life Sciences. A pharmacy degree has been offered at Queen’s University Belfast since 1929, at that time through the Belfast College of Technology, moving in 1971 to the
new Department of Pharmacy in Queen's University. The MPharm was last accredited in 2006 by the Royal Pharmaceutical Society of Great Britain, the accrediting body at that time, and the PSNI. On that occasion the course was re-accredited for five years subject to one condition. There were also three recommendations.

**Condition**
The University was required to monitor the quality of the teaching environment for pharmacy to ensure that it reached a similar standard as that for research. The report expressed specific concerns about the seminar room adjacent to the dispensing area, which was considered to require refurbishment. Moreover, the visiting team was concerned that the accommodation available to the School for teaching purposes might not be sufficient to accommodate the planned increased student numbers. Thus, it was expected that this monitoring exercise would become a coherent estates strategy developed for pharmacy, to manage planned expansion and the impact that it will have on space utilization. In response to this condition, a major refurbishment of the Pharmacy Practice Suite was carried out in the summer of 2007. The previous facilities were restructured into two seminar rooms and the Pharmacy was also refurbished to create a state-of-the-art Pharmacy Practice Suite. Also new in this area is a small museum of pharmaceutical antiquities, which is intended to give students a sense of the continuity and progression of the profession of pharmacy. Additionally, the pharmacology teaching laboratory in the Undergraduate Teaching and Practice Building was refurbished in 2007. Following a £2 million donation, existing space on the third floor of the original pharmacy building has been refurbished to create purpose-built, high quality medicinal chemistry laboratories and office space; this facility is also used by MPharm students carrying out medicinal chemistry-based research projects. The School is also seeking funding for the complete refurbishment of the adjoining medicinal chemistry teaching laboratory, at a cost of £500k; when finished, all of the teaching and research space within the original pharmacy building will have been completely refurbished.

**Recommendations**

1) The University was recommended to reconsider the policy of allowing various vacation community workplace experiences to count as part of the course, to ensure parity and to ensure that consistent quality assurance procedures are in place, including procedures for quality assuring community pharmacist tutors. In response to this recommendation, the provision of community workplace experiences has been changed. In particular, the community placement programme for level 1 students is co-ordinated by the module co-ordinator for the *Introduction to Pharmacy Practice Skills* module and each student is allocated to a community pharmacy for a half-day placement. As part of the quality assurance process, each student must complete the same set of tasks. In addition to completing a task booklet during the placement, the pharmacist assesses the student’s professional behaviour and attitude. Students are also required to complete five days of work experience in a community pharmacy in both their second and third years. (See also standards 1 and 5.6). Here, the students arrange each placement and nominate the pharmacist, who receives a letter from the placement co-ordinator, outlining the purpose of the placement and the tasks/activities that the student must undertake. During the placement, each student must complete self-directed learning recorded in a workbook, which the pharmacist is asked to sign when completed.

2) The University was recommended to reconsider the place of pharmacy practice in the course, specifically as to when students are introduced to the subject area. In response to this recommendation, the level 1 module *Introduction to Pharmacy Practice Skills* introduces the student to all aspects of pharmacy practice and a new half module (*Medicines from Concept to Clinic*) has been introduced to enhance the practice experience of students in year 1. Two level 2 modules (*Principles of Drug Action 1 and 2*) have been redesigned to enhance the integration of topics in these subjects and now include a hospital placement to enable students to integrate their knowledge with clinical practice. At level 3, the content of the pharmacotherapy modules has been re-organised so that teaching of the main clinical areas precedes the level 3 and 4 placements; in these modules, Teacher Practitioners now deliver lectures and workshops on topics relevant to their area of clinical practice. The level 4 project module has been redesigned to include elective components, one of which is Pharmacy Practice.
3) The University was recommended to keep under review the modest amount of inter-professional learning, with a view to increasing it when possible. In response to this recommendation, the MPharm programme has been modified to include inter-professional learning at level 4 with peers from nursing and medicine in two key areas, these being inter-professional ethics, addressing ethical dilemmas, and inter-professional medicines governance, exploring the relationship between prescribing, dispensing and administration and examining the importance of effective team working for medication safety.

Due to the introduction of the new pharmacist education standards during 2011, the GPhC agreed to consider extension requests from any university due to undergo reaccreditation of their MPharm degree during the 2010/2011 academic year to allow universities adequate preparation time for reaccreditation to the new education standards. The Queen’s University of Belfast applied for a one year extension and this was subsequently granted by the GPhC, extending the accreditation until 2011/2012. A reaccreditation event was subsequently scheduled for May 2012 and the outcome of this event is detailed within this record.

Documentation

The provider submitted documentation to the GPhC in line with agreed timescales and a pre-visit took place at the Queen’s University of Belfast on 3 April 2012. During the pre-visit the schedule of meetings and timings for the event were confirmed.

The following documents were submitted by the university in advance of the event:
- Completed GPhC submission template ‘Accreditation of an MPharm degree course’.
- A large number of appendices submitted as evidence to support the standards (see Appendix 1).

The event

The event began with a private meeting of the accreditation team and GPhC representatives on 8 May 2012. The remainder of the event took place on site at the Queen’s University of Belfast on 9-10 May 2012, and comprised a series of meetings with staff of the University and included a tour of the University facilities.

Accreditation team

The event was conducted jointly by two accreditation teams, one representing the GPhC and one representing the Pharmaceutical Society of Northern Ireland (PSNI) as shown below. For convenience, the remainder of the record will refer to ‘the team’.

<table>
<thead>
<tr>
<th>Name</th>
<th>Designation at the time of accreditation event</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GPhC accreditation</strong></td>
<td><strong>team:</strong></td>
</tr>
<tr>
<td>Mr Peter Curphey*</td>
<td>GPhC Team Leader; Community Pharmacy Consultant; Past President, RPSGB</td>
</tr>
<tr>
<td>Dr Paul Gard</td>
<td>Head of Pharmacology and Therapeutics Division and Reader in Pharmacology, University of Brighton</td>
</tr>
<tr>
<td>Dr Angela Alexander</td>
<td>Director of the Centre for Inter-Professional Postgraduate Education and Training, School of Pharmacy, University of Reading</td>
</tr>
</tbody>
</table>

General Pharmaceutical Council, MPharm Reaccreditation report
Queen’s University of Belfast, 8-10 May 2012
Dr Gill Hawksworth
Senior Lecturer, School of Pharmacy, University of Huddersfield and Visiting Professor; Centre for Pharmacy Postgraduate Education tutor; community pharmacist; Past President, RPSGB

Professor Bill Dawson
Bionet Ltd, Industrial pharmacist; former academic pharmacist

Mrs Leonie Milliner
Chief Executive, Association for Nutrition – lay member

PSNI accreditation team:
Professor Stephen Denyer*
Team Leader; Deputy Pro-Vice-Chancellor (Education and Students) and Professor of Pharmacy, Cardiff University

Mrs Linda Stewart
Pharmaceutical Advisor

Professor Dorothy Whittington
Non-Executive Director, Northern Health and Social Care Trust; Emeritus Professor of Psychology, University of Ulster (lay member)

Dr Geoff Hall
Associate Head, Leicester School of Pharmacy, De Montfort University

along with:

Name
Ms Joanne Martin *
Professor Brian Furman
Mr Peter McKee

Designation at the time of visit
Quality Assurance Manager (Education), General Pharmaceutical Council
Rapporteur, Emeritus Professor of Pharmacology, University of Strathclyde
Pre-registration facilitator and observer at the event

*attended pre-visit meeting on 3 April 2012.

Declaration of potential conflicts of interest

The following members made declarations of connections with Queen’s University Belfast.

- Linda Stewart obtained her degree from the University;
- Peter McKee is planning to undertake research towards the award of PhD at Queen’s;
- Angela Alexander has written modules for a Queen’s distance learning course;
- Dorothy Whittington has had research collaborations with non-pharmacy staff at Queen’s
- Stephen Denyer has co-authored publications with Professor Sean Gorman and Dr Brendan Gilmore.

The team agreed that these declarations did not represent conflicts of interest in the present context.
### Meeting the accreditation standards

<table>
<thead>
<tr>
<th>Accreditation team’s commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard 1 – Patient and public safety</strong></td>
</tr>
</tbody>
</table>
| The ethos of the School is to promote the development of students as future professionals who have the patient’s health and safety as their primary concern. The behaviour and attitudes expected of pharmacy students is introduced early and reinforced throughout the course, using the Code of Conduct for Pharmacy Students as a developmental tool. Students’ behaviour is continuously monitored throughout the degree to ensure they act professionally and that their behaviour is such that patient safety is not compromised. The School has effective systems in place to ensure that students do not jeopardise patient safety and only do tasks for which they are competent; they are monitored and assessed to ensure they always practice safely. All tasks completed by students at ward level during their hospital placements are practised in a simulated or role play situation prior to attending ward-based clinical teaching and also observed by shadowing the allocated pharmacist tutor undertaking these tasks with individual patients. Students have a responsibility to conduct themselves in a professional manner, while staff members are responsible for monitoring behaviour, addressing unsafe practice and, where there is a risk to patient safety, taking appropriate action. Any unsafe practice is immediately addressed by staff and, where appropriate, reported to the relevant person. The School has fitness to practise procedures to deal with students giving cause for concern. All students undergo required health and good character checks, including an Access NI Enhanced Level Disclosure check.

The University has a support infrastructure to deal with health, conduct and academic issues, Within the School of Pharmacy, students each have personal tutors who are generally regarded as the initial point of contact. Tutors and adviser of studies may also direct students to other support systems within the University, when necessary. Support services offered through the University are the Disability Services, the University Health Centre, the Counselling Service, the Learning Development Service and the Students’ Union Advice Centre.

*The team was confident that this standard will be met.*

| **Standard 2 – Monitoring, review and evaluation of initial education and training** |
| The University has systems and policies in place to address roles and responsibilities and lines of accountability and the documentation details the University and School mechanisms for the systematic monitoring, reviewing and evaluation of the quality of the pharmacy education and training, including the Educational Enhancement Process, the Annual Programme Review and module reviews. The documentation also provides information on the entry requirements, the monitoring and reviewing of the quality of placements and the use of student feedback. The educational resources, including staffing, library, information technology and accommodation are also detailed in the documentation, along with an explanation of how resources are allocated to the MPharm programme.

*The team was confident that this standard will be met.*

---

General Pharmaceutical Council, MPharm Reaccreditation report
Queen’s University of Belfast, 8-10 May 2012
### Standard 3 – Equality, diversity and opportunity

Initial pharmacy education and training must be based on principles of equality, diversity and fairness. It must meet the requirements of all relevant legislation.

Although the Equality Act 2010 does not apply to Northern Ireland, there is a comprehensive framework of equality and anti-discrimination law which requires the inclusion of additional legislation to address some issues which are specific to Northern Ireland. This is addressed through the Equality Commission for Northern Ireland ([http://www.equalityni.org/default.asp?secid=home](http://www.equalityni.org/default.asp?secid=home)). The University is also required to comply with Section 75 of the Northern Ireland Act 1988, which requires the University to have due regard to the need to promote equality of opportunity, for example, between persons of different religious belief, political opinion, racial group, age, marital status or sexual orientation. The documentation described how Queen’s University Belfast is committed to the promotion of equality of opportunity and to creating and sustaining an environment which values and celebrates the diversity of its staff and student body. The University has policies relating to equality and discrimination, so that all applicants, students and staff are treated fairly on the grounds of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation. This policy forms part of the formal contract of employment for staff and part of the agreement between students and the University; breaches of the policy will be regarded as misconduct and may lead to disciplinary proceedings. The University’s commitment to gender equality is highlighted through its very successful, award-winning Queen’s Gender Initiative [http://www.qub.ac.uk/sites/QueensGenderInitiative/](http://www.qub.ac.uk/sites/QueensGenderInitiative/).

The School of Pharmacy Handbook provides students with information on relevant issues such as disability, the Harassment Advisory Service, the Student Complaints Procedure and Chaplaincies. The School is committed to ensuring that equality, diversity and opportunity awareness is included as an integral part of education and training and pharmacy students are introduced to these issues in their first year. Students are required to take into account the cultural and ethnic needs of their patients when considering treatment. These matters are reinforced when the course addresses ethnic and religious issues in dispensing and prescribing where it is emphasised that students’ personal views about an individual’s lifestyle, religious beliefs, political opinion, race, gender, sexual orientation, disability or other perceived status must not affect the treatment or services offered to any individual or group.

The University has a dedicated Equal Opportunities Unit, the objectives of which include promoting best practice in Equality and Diversity, developing and supporting the implementation of policies and procedures, providing a confidential source of advice and support to individual staff members and training and briefing staff at all grades on Equality and Diversity issues. All staff must complete an online, highly interactive e-learning training system called ‘Diversity Now’. This mandatory course has been designed to raise staff awareness on equality and diversity issues as they impact upon them at Queens. The course comprises six modules and requires the completion of an assessment at the end.

*The team was confident that this standard will be met.*
| Standard 4 – Selection of students and trainees | The University Admissions Policy applies to all undergraduate admissions to Queen’s University Belfast and is reviewed annually. There is a centralised Admissions Office to ensure fairness and uniformity of procedure across the University. Admissions decisions are based on transparent academic criteria and offers for places on the MPharm are made in accordance with pre-set entrance criteria. The University encourages applications from suitably qualified applicants, particularly from groups which are currently under-represented in Higher Education and selects on the basis of fair, transparent, reliable and objective criteria, applied equitably and consistently. It admits the best-qualified applicants to degree courses in line with the University’s priorities, the targets agreed in academic plans and within the overall constraints applied by the government and professional bodies. The admissions policy complies with relevant legislation affecting the admission of students and is consistent with the QAA Code of Practice on Recruitment and Admissions. The University provides comprehensive, accurate, user-friendly and accessible information and advice to applicants and other stakeholders in the admissions process, in order to enable an informed choice of programme(s) to be made. Detailed information on entrance qualifications and associated admissions procedures for individual undergraduate programmes is provided via, for example, the printed undergraduate prospectus, the online prospectus and School brochures and leaflets. The selection criteria are explicit and objective, with academic qualifications being the main criterion. English language and mathematical abilities are essential requirements for admission to the course.

All Pharmacy students are required to undergo an AccessNI Enhanced Level Disclosure check as a condition of entry to the MPharm course and prospective students are informed that character checks will be performed before being offered a place. International students are required to submit a letter of good conduct in place of an AccessNI check but must undergo the AccessNI check for subsequent years of the course. Health checks are required and all offers for entry to the course are conditional on a satisfactory medical assessment. The university has a policy in place for handling applications from students with disabilities/special needs/medical conditions.

*The team was confident that this standard will be met.* |

| Standard 5 – Curriculum delivery | The School’s teaching philosophy is to deliver an academically stimulating course of the highest standard, in which the pharmaceutical sciences and clinical practice are integrated and which meets the needs of the profession. The MPharm graduates are competent to undertake pre-registration training and possess the foundation, knowledge, skills and capacity for life-long learning such that they can contribute meaningfully to the profession. The subject matter of the degree is presented as a logical, coordinated, integrated progression to allow students to obtain a comprehensive knowledge of all aspects of the preparation, distribution, action and uses of drugs and medicines.

In the early part of the degree course students learn those aspects of the pharmaceutical sciences that underpin the practice of pharmacy. Fundamental scientific principles are outlined in detail and then applied in laboratory classes with a progression towards practical classes that require students to develop their own methodology to improve problem-solving skills and |

General Pharmaceutical Council, MPharm Reaccreditation report
Queen’s University of Belfast, 8-10 May 2012
independent thinking. As the students progress, they are encouraged to take increased responsibility for their learning through greater use of workshops, tutorials, hospital-based teaching, project work, group work, role play, debate and CAL, which promote the development of life-long learning skills. Skills directly relevant to the student’s future role as a pharmacist are introduced in the first year and built upon through the subsequent years of the course. The professional nature of the MPharm programme is reinforced in all years of the course and the course includes inter-professional learning (IPL) with medical and nursing students. Clinical placements in hospital and community pharmacy, OSCEs and patient-based case note assessments are employed to present students with more complex clinical scenarios. The hospital placements and IPL activities clearly meet criterion 5.6 of this standard, and, indeed, the team identified the innovative nature of the hospital placements as a strength of the programme. However, the team was concerned that the community pharmacy placements were not under the School’s control and, consequently, recommended that the School should devise a strategy to develop such practice activities (see Recommendation).

The documentation provides examples of the progressive nature of the curriculum in relation to the themes of communication and consultation skills, formulation of medicines, quality of medicines and pharmaceutical microbiology, showing how the topic is introduced, with increasing complexity to reach the standard required by the regulatory body as defined in standard 10. The assessment methods have been designed and optimised according to the outcome levels in standard 10, with progressively increasing emphasis on determining the student’s ability to perform in a simulated environment or real life and to act independently and consistently. Assessments thus become more complex as the course progresses, with a greater emphasis on problem solving and independent working at the higher levels. There is an emphasis on demonstration of safe practice throughout and pass marks are higher for subjects where a higher level of accuracy and precision has been deemed necessary to assure patient safety. Serious errors or omissions by students in the assessments across the MPharm lead to the award of a mark of zero and the necessity to repeat the assessment.

The team was confident that this standard will be met.

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

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

The documentation describes the various opportunities for undergraduate students to interact with pharmacists throughout the course, including during clinical and community placements and with academic staff who are professional role models in a number of different categories, including both pharmacists and non-pharmacists. Additionally, undergraduate pharmacy students interface with other healthcare professionals or other undergraduate students studying health sciences, both in the clinical placement and in Inter-professional Education (IPE) workshops.

The School of Pharmacy places significant emphasis on the provision of effective pastoral care and academic leadership to all of its students, reflecting the University priority of supporting student attainment, improving retention and increasing graduate employment. Here the School works closely with both the Student Guidance Centre and the Students’ Union to
provide a full set of support services for students. The School has a number of support structures in place, including the personal tutor scheme, the Advisors of Studies and various committees, including the Staff Student Consultative Committee (SSCC) and the School Student Progress Committee, in addition to informal/ad hoc support provided by academic and academic related staff. The role of personal tutors is to provide general academic and personal support, encouragement and limited advice on pastoral issues, referring students where necessary to other relevant expertise within the School/University support services. All students in the School of Pharmacy are expected to maintain regular contact with their tutors through all four years of the MPharm programme and meetings will be used by the tutors as opportunities to monitor the academic progress of their tutees. Students are strongly encouraged to build rapport with their tutor throughout the course of their studies.

The School of Pharmacy and the University provides specific support for those students with disabilities; their specific requirements are discussed and attempts are made to resolve any issues to ensure that they have a fulfilling learning experience while at Queen’s and experience no disadvantage or impediment to academic attainment and progress as a result of their disability.

*The team was confident that this standard will be met.*

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

Anyone delivering initial education and training should be supported to develop in their professional roles.

A wide range of mechanisms is in place to support all staff involved in delivering initial education and training on the MPharm. The Staff Training and Development Unit provides a support service to all staff; its remit is the training and development of all grades and categories of staff and, accordingly, it provides courses on numerous topics including administrative skills, communication skills, equality and diversity, finance, health and safety, IT, personal and career development and teaching and learning. The University provides a specific teaching postgraduate qualification (PGCHET), which is primarily aimed at new academic staff members on probation, and provides a formal qualification in teaching and learning in higher education. All lecturers on probation are required to complete the course and lecturers with experience may also apply. Staff members are encouraged to have their teaching regularly peer reviewed, and probationary staff must document outcomes as part of the probation process. Mentoring support is provided to all staff, and the mentor offers guidance on, for example, the content of lectures, marking schemes, supervision of practical classes, setting and marking of exam questions and giving appropriate feedback to students, MPharm research projects, and conduct of peer review of lectures.

There is an appraisal mechanism for academic staff and the Head of School is responsible for initiating appraisal and identifying suitable appraisers. The process requires staff to identify their objectives and associated tasks, which should map onto the key School goals in respect of education, research, scholarly activity, administration and management for the following year, and to address achievements across the previous year.
The University provides all new staff with an induction programme. An online staff ‘welcome and induction’ is provided for staff which includes information from the Personnel Department, the Finance Department, The Staff Training and Development Unit and Information Services. The School also has an induction programme for all new staff, including a ‘New Staff Induction Package’, which provides detailed information on a range of topics and an overview of the School. Staff members are also directed to the online Student Handbook, which gives detailed information on the structure and content of the MPharm.

*The team was confident that this standard will be met.*

<table>
<thead>
<tr>
<th>Standard 8 – Management of initial education and training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and training must be planned and maintained through transparent processes which must show who is responsible for what at each stage</td>
</tr>
</tbody>
</table>

There are several systems and structures in place that operate to successfully manage the education of undergraduate students enrolled on the MPharm degree. The education portfolio is managed by the Director of Education. The effective management of education within the School of Pharmacy is facilitated by several sub-groups, each of which is responsible for particular functions such as managing and reviewing operational procedures and quality assurance processes in relation to placements, module reviews, student feedback, timetabling, the evaluation of the quality of examination papers, processing examination results, liaison with external examiners, ensuring compliance with university regulations, evaluation of the integration of the content of each module both across and within each year group and examination of changes in professional practice that may affect the academic content of the MPharm programme.

The MPharm degree uses a number of mechanisms for the provision of information, including lectures, tutorials, workshops, directed learning and self-study. The balance between these different teaching types is defined by the module delivery team under the auspices of the module coordinator and the Director of Education, who is directly responsible for the design and provision of the MPharm programme. The management of integration of the teaching of modules both within any academic year and between each academic year is overseen by the School Teaching and Learning Review Sub-Group.

The documentation also describes the mechanisms in place for ensuring access to and availability of the learning facilities for the provision of the MPharm degree programme, including laboratory and lecture accommodation, library facilities and computer/open access facilities, as well as the management of the clinical and community pharmacy placements. Clinical placements are facilitated by a network of clinical teacher practitioners based throughout the hospital Trusts in Northern Ireland and the documentation describes the mechanisms in place to ensure the quality of the placements. As part of the quality assurance process, small group teaching is employed at a ward level where students are supervised. Students are allocated to an individual pharmacist tutor at all times during the hospital placements.

*The team was confident that this standard will be met.*
| Standard 9- Resources and capacity | The documentation describes the robust and transparent mechanisms for securing an appropriate level of resource for the MPharm degree at University and School level. The resource includes sufficient qualified and experienced staff from relevant disciplines to deliver the curriculum to students. The current academic staff complement provides a necessary blend of senior and junior staff, with 8/18 senior staff (professors, readers, senior lecturers) being pharmacists (through PSNI and/or GPhC). Within the junior academic staff (lecturers, teaching fellows), 7/22 are pharmacists, with a further two staff members being pharmacists who received their education overseas. The School of Pharmacy employs a number of Teacher Practitioners (8) and Honorary Appointments (one professor, one senior lecturer and three lecturers) and visiting lecturers/clinical pharmacists (19) who, with the exception of one visiting lecturer, are all pharmacists. All full-time academic staff within the School of Pharmacy (including full-time teaching fellows) and one part-time teaching fellow (out of three) hold Doctorates of Philosophy, indicating the research experience of the staff. There are clearly sufficient numbers of pharmacists to act as tutors and professional mentors and who can work with non-pharmacist academics to help them understand the relevance of their discipline to pharmacy and deliver their area of expertise in a pharmaceutical context. The documentation also describes the physical resources including lecture theatres, teaching laboratories, libraries and computing facilities available for the delivering the MPharm degree, which the team confirmed to be of a high standard and fit for purpose. **The team was confident that this standard will be met.** |
| Standard 10 - Outcomes | The team scrutinised the learning outcomes by discussions with the teaching staff in two parallel sessions comprising a ‘science into practice’ session and a ‘practice from science’ session. Rather than examining each of the 58 outcomes in these sessions, a selection of eight outcomes was chosen for detailed discussion. The Queen’s University staff members were unaware of the outcomes to be discussed until the start of meeting 10. The outcomes selected were 10.1d, 10.2.1b, 10.2.1g, 10.2.2a, 10.2.3b, 10.2.3n, 10.2.3o and 10.2.5b (see Appendix 2). Additional outcomes were covered in discussions addressing the various standards 1-9 and by the team’s scrutiny of the documentation. For each of the eight outcomes scrutinised in detail, the evidence provided by the discussions with the staff, along with other evidence provided with the documentation, gave the team confidence that these outcomes would be met at the required level. As this selection represented approximately 14% of the total outcomes, the team was confident that all other outcomes would be similarly met. This view was supported by the documented material for each of the other outcomes, which had also been scrutinised by the team. **Thus, the team was confident that this standard will be met.** |
Summary and conclusions

The team has agreed to recommend to the Registrar of the General Pharmaceutical Council and the Council of the Pharmaceutical Society of Northern Ireland that the MPharm degree delivered at Queen’s University should be reaccredited for a full period of 6 years with an interim 3 year practice visit. There are no conditions and there is one recommendation.

Recommendation:

- The community pharmacy experience as currently provided outside the quality management of the University is not acceptable as a placement or to meet the outcomes in Standard 10. Therefore the School should devise a strategy to develop community practice activities that increase year on year. This relates to criterion 5.6.

The team identified the following strength:

- The innovative approach to hospital placements.

Standing condition of accreditation:

These are the conditions which will apply in all circumstances of degree accreditation:

1. The school or department of pharmacy always seeks approval from the General Pharmaceutical Council for curriculum amendments and always at least informs the General Pharmaceutical Council of significant changes to pharmacy undergraduate student numbers or resources for their teaching, learning support and assessment, including any change from internal to teaching, learning and assessment from outside the school or department;
2. The school or department of pharmacy produces and submits to the General Pharmaceutical Council annually requested data on student numbers and progression and degree awards;
3. The school or department of pharmacy produces and submits to the General Pharmaceutical Council annually requested information about the extent of human and physical resources it enjoys for the delivery and support of the degree course;
4. The school or department of pharmacy or the university makes students and potential students aware of the existence and Internet address where they can view the General Pharmaceutical Council’s summary reports of degree accreditation exercises, main after- actions therefrom and of the timetable for future accreditation exercises.
The Pharmacy Order 2010 states:
Part 5 Education, training and acquisition of experience and continuing professional development, Information to be given by institutions or other providers, 46. ...

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

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

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


Caution: Preregistration and employment as a pharmacist:

- In respect of all students, successful completion of an accredited course in not a guarantee of a placement for a pre-registration year or of future employment as a pharmacist.

Following the above reaccreditation event, the Registrar of the General Pharmaceutical Council agreed with the accreditation team’s recommendation and approved the reaccreditation of the Queen’s University Belfast MPharm degree for a further period of six years (until end of the 2017/2018 academic year), with an interim practice visit to each site in three years (in the 2014/2015 academic year).
Appendix 1 - Documentation submitted

Standard 1
1.1a Reporting system for student issues
1.1b SOP for recording student issues on SharePoint
1.2a Queens’ University Belfast Fitness to Practise Procedure
1.2b GPhC guidance on student fitness to practise procedures in schools of pharmacy
1.3 GPhC Code of Conduct for pharmacy students
1.4 Train the Trainers manual
1.5 Presentation given by Lead Practitioner entitled, “An overview of the role of the Pharmacist Tutor.”
1.6 Professional Behaviour Assessment Form
1.7a Case study - Plagiarism and collusion in the Level 3 Pharmacy Practice module Proprietary Dispensing (PMY3064)
1.7b Demonstrator guidance (Responding to Symptoms and Pharmacy Practice)
1.8a Level 1 Community Placement Student Portfolio
1.8b Professional Indicator Questionnaire for Level 1 students
1.8c Letter to pharmacists regarding Level 1 Placements
1.9 Letter to pharmacists regarding work experience (prior to commencement into levels 3 and 4)
1.10a Level 2 Community Pharmacy Workbook
1.10b Level 3 Community Pharmacy Workbook
1.11 Health and Safety Lecture to students on the Induction week
1.12 PMY2006 Extemporaneous Dispensing safety information
1.13 Presentation by safety officer to level 4 students as part of the project module (PMY4005)
1.14 DSEAR and COSHH Proforma risk assessment form
1.15 Completed DSEAR and COSHH Proforma risk assessment form
1.16a Coordination, supervision and assessment of clinical placements
1.16b Teaching Practitioner work plan from Jan 2012-June 2013
1.17 PMY2005 module information
1.18 Details of the Northern Ireland Teaching Practitioners
1.19 School of Pharmacy Student Agreement Form
1.20 School of Pharmacy Health and Safety training of demonstrators 2010 & 2011
1.21 Summary of issues covered at demonstrator training 2011
1.22 Indicative mark schemes given to students in PMY3064 and PMY4003
1.23 Queens' University Belfast Disability Services questionnaire to determine support requirements
1.24a Information regarding Disability Service available online (http://www.qub.ac.uk/directorates/sgc/disability/)
1.24b Coming to Queen’s University – A Guide for Prospective Students with a Disability
1.24c Studying at Queen’s University – A Guide for Students with a Disability
1.24d Guide for prospective students with Asperger’s Syndrome
1.25 Disability Services Disabled Students’ Allowance Information Leaflet
1.26a Disability Form A
1.26b Disability Form B
1.27 Disability case study
1.28 Guide for personal tutors
1.29 Guideline for SSPCs available online (http://www.qub.ac.uk/directorates/AcademicStudentAffairs/AcademicAffairs/GuidelineforSSPCs/)
1.30 Queens University Belfast General Regulations 2011‐12
1.31 University regulations governing Staff Student Consultative Committees
1.32a Present and past membership of the Staff Student Consultative Committee
1.32b Examples of minutes from Staff Student Consultative Committee meetings
1.33 Personal Tutor Bulletin in which the Summary Action Referral Chart is described
1.34 Information regarding the University Health Centre available online (http://www.universityhealthcentreatqueens.co.uk)
1.35 Information regarding the University Counselling Service available online (http://www.qub.ac.uk/counselling)
1.36 Information regarding the Learning Development Service available online (http://www.qub.ac.uk/sgc/learning)
1.37 Learning Development Support slide
1.38 Information regarding the Student Union Advice Centre online (http://www.qubsu.org/advice.asp)
1.39 Information regarding the International and Postgraduate Student Centre available online (http://www.qub.ac.uk/directorates/sgc/aboutus/ips)
1.40 Information regarding International Student Support available online
(http://www.qub.ac.uk/directorates/AcademicStudentAffairs/InternationalStudentSupport/)
1.41 Letter approving Queens’ University Belfast Fitness to Practise procedures from the RPSGB
1.42a Minutes of a Fitness to Practise panel meeting (1-4-2011)
1.42b Minutes of a Fitness to Practise panel meeting (14-9-2011)
1.42c Letter to a student detailing the outcome of a Fitness to Practise hearing
1.43 Presentation given to Level 1 students at a Code of Conduct workshop
1.44 Presentation given to Level 3 students (PMY3069) regarding Code of Ethics and Professional Decision Making
1.45 Presentation given to Level 2 students (PMY2006) regarding extemporaneous dispensing (see slide 22)
1.46 Queens' University Belfast Admissions Policy (2011 entry)
1.47 Disclosure form for applicants to Medicine, Dentistry or Pharmacy
1.48 Information regarding Access NI available on the Department of Justice website (http://www.dojni.gov.uk/accessni)
1.49 Queens' University Belfast Safeguarding Children and Vulnerable Adults Policy
1.50 Queens' University Belfast prospectus entry for Pharmacy (highlighting the need for an Access NI check)
1.51 Entrance requirements to study Pharmacy at QUB (highlighting the need for an Access NI check)
1.52 Annual criminal history self-declaration form

**Standard 2**

2.1 Organogram depicting the University Structure
2.2 Organogram depicting School Structure
2.3 Membership of Boards, Committees and Sub-Groups
2.4 Examples of minutes of School Sub-Groups
2.5 Minutes of Accreditation and Curriculum Sub-Group
2.6 Presentation to staff at the School Away Day describing the introduction of the new Level 1 module, Medicines from Concept to Clinic
2.7 Level 1 Semester One booklet (2011)
2.8 Folder containing Information regarding meetings with Stakeholders (2.8a Minutes of a stakeholders’ meeting 6th May 2011, 2.8b Minutes of a stakeholders’ meeting 7th December 2011, 2.8c Presentation by Director of Education to Stakeholders 7th December 2011)
2.9 Folder containing information sources regarding admissions criteria for undergraduate studies (2.9a Entrance requirements detailed on the School of Pharmacy Webpage, 2.9b Entrance requirements detailed on the UCAS Webpage, 2.9c University Prospectus 2011 illustrating entrance requirements, 2.9d University Prospectus 2012 illustrating entrance requirements 2.9e Examples of publicity and information material that is provided to students at career fairs and open days)
2.10 Regulations regarding admissions of applicants with a criminal record
2.11 UCAS entry points, final degree awards and outcome of achievement in the pre-registration examination of QUB Pharmacy students
2.12 The Educational Enhancement Process at QUB
2.15 Summary details of Performance in University Subject Review (2005)
2.16 Train the Trainers manual
2.17 Presentation given by the Lead Teaching Practitioner at the Train the Trainers course
2.18 Briefing booklet for Pharmacist Tutors regarding the Level 3 placement
2.19 Pharmacist tutor responsibilities
2.20 Assessment of clinical (hospital) placements (2.20a Form used by students to provide feedback regarding the Pharmacist Tutor, 2.20b Example of feedback from students on Pharmacist Tutors, 2.20c Assessment questionnaire of clinical placements by Level 1 MPharm students, 2.20d Assessment questionnaire of clinical placements by Level 2 MPharm students, 2.20e Assessment questionnaire of clinical placements by Level 3 MPharm students, 2.20f Assessment questionnaire of clinical placements by Level 4 MPharm students, 2.20g An example of a completed assessment of the clinical placements by Level 3 MPharm students, 2.20h An example of a completed assessment of the clinical placements by Level 4 MPharm students, 2.20i Feedback from Pharmacist tutors on the Level 3 placement)
2.21 Presentation given by the Lead Teaching Practitioner (Ms. Roisin O’Hare) to the annual meeting of the Teaching Practitioner Steering Group (2011)
2.22 Folder containing information regarding Community Placements (2.22a Level 1 Community Placement Student Portfolio, 2.22b Letter from Placement Coordinator to Pharmacists who facilitate Placements for Level 3 and Level 4 Students, 2.22c Example of completed Community Placement Student Portfolios Level 2, 2.22d Example of completed Community Placement Student Portfolios Level 3)
2.23 Folder containing information regarding First Year Experience Surveys and actions taken in response to findings (2.23a Summary of results from the 2010 and 2011 First Year Experience surveys, 2.23b Minutes of school board meetings in which the importance of feedback was stressed, 2.23c Presentation given to students regarding feedback, 2.23d Arrangements for the Welcome Week for Level 1 students)
2.24 Summary of results from the 2010 and 2011 Second Year Experience Surveys
2.25 Summary of the results from the National Student Survey 2010 and 2011 for the School of Pharmacy, QUB
2.26 Folder containing information regarding staff teaching evaluation (2.26a Proforma for the paper-based teaching evaluation questionnaire, 2.26b Examples of completed teaching evaluation questionnaires)
2.27 Details of the NHS appraisal system for teaching practitioners
2.28 Handbook provided by QUB to SSCC representatives
2.29 Details of the Degree Plus Scheme at QUB
2.30 Information regarding the Pharmacists in Schools programme
2.31 Folder containing information regarding Staff Student Consultative Committee meetings and how issues raised are addressed (2.31a Examples of minutes of Staff Student Consultative Committee meetings, 2.21b Minutes of the School Board, 1st December 2010 illustrating the transfer of a request from the SSCC representatives to staff)
2.32 Information regarding the PDP workshop
2.33 Details of the University Counselling Service
2.34 Folder containing details of Academic Staff (2.34a Summary of Academic Staff by Grade, 2.34b Academic Staff by Name, Qualifications, Contractual Status and Outline of School Teaching, Research and Major School Administrative Duties, 2.34c Staff changes since previous accreditation)
2.35 Advertisement for three lecturer positions within the School of Pharmacy
2.36 Major purchases of equipment for teaching since last accreditation visit
2.37 List of Equipment used for the Provision of the MPharm Programme
2.38 Library expenditure on the School of Pharmacy
2.39 Information technology packages used for teaching purposes on the MPharm programme Pharmacy
2.40 Teaching facilities within the School of Pharmacy

**Standard 3**
3.1 Equality and Diversity Policy of QUB
3.2 Grievance regulations for staff grades 1-5
3.3 Grievance regulations for staff grades 6/Ac1 and above
3.4 Student Complaints Procedure
3.5 Updating Equal Opportunities database
3.6 Section 75 of the Northern Ireland Act 1998
3.7 University Equality Scheme
3.8 Equality impact assessments on the University’s Staff Appointments Procedure
3.9 Equality impact assessments on Disabled Access
3.10 Equality impact assessments on Student Admissions
3.11 University Admissions Policy
3.12a QUB Corporate Plan 2006-2011
3.12b QUB Corporate Plan 2011-2016
3.13 Equality data captured by the University Planning Office
3.14 School Information leaflet
3.15 Evidence regarding widening participation
3.16 School Bronze SWAN application
3.17 SWAN action plan for School
3.18 SWAN support letter from Head of School
3.19 QUB General Regulations for Undergraduate students 2011/12
3.20 Student Charter
3.21 MPharm Handbook 2011-2012
3.22 Presentation by Mr Paul Browne to Level 1 students (PMY 1014)
3.23 Presentation by Dr Carole Parsons to Level 1 students (PMY 1014)
3.24 Cultural and religious considerations when dispensing
3.25 Hard copy of an online programme regarding cultural and ethnic needs of patients
3.26 Pharmaceutical Society of Northern Ireland Code of Ethics
3.27 Presentations to students regarding the PSNI Code of Conduct
3.28 Community Placement Booklet
3.29 Introductory Lecture for PMY2006 Extemporaneous Dispensing
3.30 Information regarding the diversity now online course
3.31 Statistics regarding completion of the diversity now training course by staff from the School of Pharmacy

**Standard 4**

4.1 Queen’s University Belfast Admissions Policy 2011 Entry
4.2 A Folder containing Queen’s University Belfast Corporate Plans (4.2a Queen’s University Belfast Corporate Plan 2006-2011, 4.2b Queen’s University Belfast Corporate Plan 2011-2016)
4.3 QAA Code of Practice on Recruitment and Admissions
4.4A Folder containing information regarding information sources regarding admissions procedures for undergraduate students (4.4a Queen’s University Belfast | Undergraduate Prospectus 2012 | Pharmacy, 4.4b Online prospectus (course finder), 4.4c Information leaflet for careers fairs and open days, 4.4d Prospective student portal, 4.4e Pharmacy entry profile 2012, 4.4f Entrance requirement MPharm website, 4.4g UCAS pharmacy application statistics)
4.5 Domestic Recruitment Policy
4.6 A Folder containing information regarding Widening Participation Policies (4.6a QUB widening participation policy 2008-2011, 4.6b Widening participation strategy 2005-2008)
4.7 Presentation by the Director of Education to prospective students at Open Days
4.8 Information regarding the Pharmacists in Schools Programme
4.9 Interview Rating Form used for the Graduate Interviews
4.10 INTO Queen’s University Brochure
4.11 Application Form: Standard/Enhanced Disclosure ISA Registration
4.12 Annual Self Declaration Form
4.13 Queen’s University Policy on Safeguarding Children and Vulnerable Adults
4.14 Audit Report regarding the implementation of the University Policy on Safeguarding Children and Vulnerable Adults
4.15 Disclosure form of a student who was refused entry onto the course
4.16 File note of the meeting regarding an application from a student detailed in evidence 4.21
4.17 Presentation to Level 4 students by the PSNI regarding Pre-Registration training
4.18 Application form to register as a trainee of the PSNI
4.19 Queen’s University Policy for handling applications from students with disabilities/special needs/medical conditions

**Standard 5**

5.1 Organisation of the MPharm programme
5.2 Folder containing information regarding the Teaching and Learning Review Sub-Group Meeting, 9th March 2012 (5.2a Minutes from the Teaching and Learning Review Sub-Group Meeting 9th March 2012, 5.2b Information provided to the membership of the Teaching and Learning Review Sub-Group for discussion at the meeting on the 9th March 2012)
5.3 A Folder showing examples of integration of taught topics on the MPharm programme (5.3a Cardiovascular Medicine, 5.3b Communication, 5.3c Drug Delivery, 5.3d Formulation of Medicines, 5.3e Infection, 5.3f Nephrology, 5.3g Patient safety)
5.4 External examiners’ reports (2006-2011)
5.5 Head of School’s response to external examiners’ reports (2006-2011)
5.6 Folder containing information regarding the Annual Programme Review at QUB (5.6a The annual programme review process at QUB, 5.6b Template for the annual programme review, 5.6c Annual programme review 2008-2009 and 2009-2010, 5.6d Annual programme review 2010-2011, 5.6e Response from the annual programme review group to the School 2010, 5.6f Response from the annual programme review group to the School 2010)
5.7 QUB Fitness to Practise procedures
5.8 Letter from Professor Sean Gorman to Mr. Damian Day confirming that the one outstanding condition following the previous accreditation visit had been addressed
5.9 ISAB documentation
5.10 Report from the ISAB to QUB
5.11 Pharmacy education research papers
5.12 Teaching and Learning Strategy
5.14 Plans for the proposed Clinical Simulation Centre
5.15 Folder containing information regarding meetings with stakeholders (5.15a Stakeholders’ meeting 6th May 2011, 5.15b Stakeholders’ meeting minutes 7th December 2011, 5.15c Presentation to stakeholders at the meeting of the 7th December 2011)
5.16 Director of Education Presentation to Level 1 Students Regarding Drug Profiles and Meeting Patients
5.17 Assessment Strategy

General Pharmaceutical Council, MPharm Reaccreditation report
Queen’s University of Belfast, 8-10 May 2012
5.18 Folder containing results from the National Student Survey (5.18a National Student Survey 2010 and 2011, 5.18b NSS scores in Schools of Pharmacy)
5.19 Folder containing results from the first and second year experience surveys (5.19a Summary of results from the 2010 and 2011 First Year Experience surveys, 5.19b Summary of results from the 2010 and 2011 Second Year Experience surveys)
5.20 University Calendar for Undergraduate Students 2011/2012

Standard 6
6.1 Summary of academic staff by grade
6.2 Experience of Pharmacist staff within the School of Pharmacy
6.3 Academic Staff by Name, Qualifications, Contractual Status and Outline of School Teaching, Research and Major School Administrative Duties
6.4 Experience of Non-Pharmacist staff within the School of Pharmacy
6.5 External supervisors for the MPharm research project module (PMY 4005)
6.6 Academic-Related and Clerical Staff by Name, Grade and Outline of Major School Administrative Duties
6.7 A folder containing MPharm course booklets (6.7a Level 1 Semester 1, 6.7b Level 1 Semester 2, 6.7c Level 2 Semester 1, 6.7d Level 2 Semester 2, 6.7e Level 3 Semester 1, 6.7f Level 3 Semester 2, 6.7g Level 4 Semester 1, 6.7h Level 4 Semester 2)
6.8 Organograms depicting school structure
6.9 A folder containing the Staff Student Consultative Committee Regulations (6.9a SSCC regulations, 6.9b Guidelines for SSPC)
6.10 MPharm student handbook 2011-2012
6.11 Queen’s University Belfast Guide for personal tutors
6.12 Personal Tutoring Guidelines for Staff, School of Pharmacy, Queen’s University of Belfast
6.13 School of Pharmacy welcome week programme September 2011
6.14 Details regarding the Degree Plus scheme
6.15 PDP workshop presentation to Level 1 students
6.16 CV writing workshop for Level 1 students
6.17 A folder containing information regarding the role of tutors with respect to Professionalism and skills development monitoring (6.17a Presentation to University staff regarding “Improving employability: enhancement of core skills and professionalism within the MPharm degree” (TQEF) and 6.17b subfolder containing examples of completed professionalism indicator questionnaires.
6.18 Information regarding the counselling service provided by the Student Guidance Centre
6.19 Code of Practice for Advisors of Studies
6.20 University Calendar for Undergraduate Students
6.21 Composition of Committees offering Academic Support and Guidance to MPharm Students
6.22 Examples of minutes from the Staff Student Consultative Committee
6.23 Hard copy of the information contained on the University Disability Service webpage
6.24 A folder containing information regarding PDP and Reflective Learning (6.24a PDP E-Folio on Queen’s Online, 6.24b Completed PDP Questionnaire)
6.25 A lecture from Michelle McCorry (PSNI) to Level 4 MPharm students entitled, “Professionalism and Continuing Professional Development."
6.26 Examples of Level 1 reflective portfolios
6.27 Folder containing examples of community placement reflective portfolios (6.27a Examples of Level 2 community placement reflective portfolio, 6.27b Examples of Level 3 community placement reflective portfolios)
6.28 A folder containing two examples of reflective accounts
6.29 A lecture entitled, “Clinical and Social Care Governance,” presented by Dr. Heather Bell to level 4 MPharm students
6.30 Information given to students concerning Clinical Placements
6.31 A folder containing information regarding assessment of clinical placement (6.31a a sub-folder containing information on Assessment procedures for clinical placements, 6.31b a sub-folder containing presentations to students regarding assessment, 6.31c a sub-folder providing details of the Pharmacy undergraduate OSCE Handbook, 6.31d a sub-folder containing a complete set of OSCE examples)
6.32 Pharmacy student agreement form 2011-2012
6.33 Hard copy of information regarding career education, information and guidance available at Queen’s University of Belfast
6.34 Presentation by Peter McKee (Pre-Registration Lead PSNI) to Level Four students entitled, “Pre-Registration Training 2012-2013 Applications,”
6.35 Presentation by Lead Teacher Practitioner (Ms. Roisin McCrory) to Level Four students entitled, “Hospital Pre-Registration in Northern Ireland.”
6.36 A folder containing information regarding the School of Pharmacy Careers fair (6.36a Pharmacy Careers Workshop student evaluation proforma and 6.36b Presentation by Fidelma Dynan (Careers Adviser) “Application and Interviews”)

Standard 7
7.1 Support available through the QUB Staff Training and Development Unit
7.2 Training courses available through the Staff Training and Development Unit
7.3 Staff guidance for booking training courses with the Staff Training and Development Unit
7.4 Training and development needs form
7.5 Reflections newsletter (Centre for Education Development, QUB)
7.6 A publication available for new lectures from the Staff Training and Development Unity entitled, “In at the deep end - Starting to teach in Higher Education.”
7.7 A publication available for new lectures from the Staff Training and Development Unity entitled, “Course design for increased student satisfaction.”
7.8 Centre for Educational Development course list 2011-12
7.9 Folder containing information given to staff upon induction (7.9a School of Pharmacy Staff Induction Package, 7.9b a pdf of MPharm keywords)
7.10 Document describing the responsibilities of the module coordinator
7.11 Postgraduate Certificate in Higher Education Teaching course details
7.12 Teaching Evaluation Questionnaire form used by staff
7.13 Probation report identifying poor TEQ
7.14 Probation report showing improved TEQ
7.15 Peer review examples of staff teaching
7.16 Probation procedures
7.17 Staff appraisal process covering notes
7.18 Sample appraisal form showing School objectives
7.19 Successful Teaching Awards application
7.20 Successful Teaching Quality Enhancement Fund application report presentation
7.21 Successful TESS funding application for project on enhancing the student academic experience
7.22 Mathematics in Pharmacy presentation to Centre for Educational Development
7.23 Sample fact sheets on mathematics information for students
7.24 Guidance for personal tutors
7.25 Welcome and Orientation online documentation for new staff
7.26 Welcome and induction checklist form for new staff
7.27 Human Resources strategy 2011-2016

**Standard 8**
8.1 Examples of minutes of recent meetings of the various Education Sub-Groups
8.2 Membership of Boards, Committees and Sub-Groups
8.3 Examples of minutes of staff meetings illustrating the dissemination of information from the Education Sub-Groups to staff
8.4 A summary of the teaching facilities within the School of Pharmacy
8.5 Facilities available to MPharm students within the Biomedical library
8.6 Facilities available to MPharm students within the Medical library
8.7 Facilities available to MPharm students within the McClay library
8.8 Student computing areas and open access facilities
8.9 Delivery teams for the MPharm programme
8.10 Summary of the modes of module delivery
8.11 MPharm Course Booklets
8.12 MPharm Student Handbook
8.14 An Overview of the Role of the Pharmacist Tutor, a presentation given by the Lead Teacher Practitioner at the Train the Trainers course
8.15 Feedback from Pharmacist Tutors on QUB Level 3 Placement
8.16 Level 3 Clinical Placement Questionnaire (Jan 2011)
8.17 Tutor Feedback Forms for completion/completed by Level 4 students regarding Hospital Placements
8.18 A Professional Behaviour assessment form to summarise the student interaction with the group (completed by the Pharmacist Tutor)
8.19 A presentation by the Lead Teacher Practitioner Pharmacist to the Clinical Teaching Steering Group
8.20 Pharmaceutical Care Plan (PCP) Marking Scheme
8.21 A Folder containing hospital placement portfolios (8.21a Level 2 2011 Hospital Placement Portfolio, 8.21b Level 3 2011 Hospital Placement Portfolio, 8.21c Level 4 2011 Hospital Placement Portfolio)
8.22 Level 1 Community Placement Student Portfolio 2011-2012
8.23 Letter from the Community Placement Coordinator to Pharmacists
8.24 Blank and Completed Community Pharmacy Workbook (Level 2)
8.25 Blank and Completed Community Pharmacy Workbook (Level 3)

**Standard 9**
9.1 Expenditure (£) on pay, non-pay and equipment per year and per student FTE since last accreditation
9.2 University Academic Plan
9.3 Five year Academic Plan for the School of Pharmacy
9.4 A Folder containing results from the National Student Survey (9.4a National Student Survey results for the School of Pharmacy QUB in 2012 and 2011, 9.4b National Student Survey Results for UK Schools of Pharmacy)
9.5 Summary of academic staff by grade
9.6 Academic staff by name, qualifications, contractual status and outline of School teaching, research and major school administrative duties
9.7 Staff changes since previous accreditation
9.8 Arrangements for the Welcome week for Level 1 students
9.9 Leadership experience of pharmacists at the School of Pharmacy
9.10 Membership of Boards, Committees and Sub-Groups within the School of Pharmacy
9.11 Leadership experience of non-pharmacists at the School of Pharmacy
9.12 External research supervision for Level 4 projects
9.13 Probation regulations and key indicators for probationary staff
9.14 Examples of peer review of academic staff
9.15 Promotions procedure at QUB
9.16 Appraisal procedure at QUB
9.17 Strategic organisation and day-to-day management of the placement
9.18 Entry profile of students to the MPharm program in terms of Number of Applicants, Number of Enrolments and UCAS points
9.19 Academic-Related and Clerical Staff by Name, Grade and Outline of Major School Administrative Duties
9.20 Major purchases of equipment for teaching since last accreditation visit
9.21 List of Equipment used for the provision of the MPharm Programme
9.22 Library expenditure on the School of Pharmacy
9.23 Information Technology Packages used for teaching purposes on the MPharm programme
9.24 Teaching facilities within the School of Pharmacy
### Appendix 2 – Standards for the initial education and training of pharmacists

#### Standard 1 – Patient and public safety

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

1.1. There must be effective systems in place to ensure that students and trainees:

1.1.a do not jeopardise patient safety;
1.1.b only do tasks for which they are competent, sometimes under supervision;
1.1.c are monitored and assessed to ensure they always practice safely. Causes for concern should be addressed immediately;
1.1.d have access to support for health, conduct and academic issues;
1.1.e must not be awarded an accredited degree or pass pre-registration training if they might pose a risk to patients or the public;
1.1.f understand what is and what is not professional behaviour and are familiar with the GPhC’s *Code of Conduct for Pharmacy Students* (2010)*Standards of conduct, ethics and performance* (2010);
1.1.g understand what fitness to practise mechanisms apply to them. All schools of pharmacy must have fitness to practise procedures to deal with student causes for concern;
1.1.h undergo required health and good character checks;
1.1.i understand that it is an offence to impersonate a pharmacist. Pharmacists are registrants of the GPhC.
Standard 2 – Monitoring, review and evaluation of initial education and training

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

2.1 There must be systems and policies in place covering the following:
   2.1.a information about roles & responsibilities and lines of accountability;
   2.1.b university information on:
      2.1.b.i entry requirements;
      2.1.b.ii the quality of teaching, learning and assessment;
      2.1.b.iii the quality of placements and other practice learning opportunities;
      2.1.b.iv appraisal and feedback systems for students and trainees;
      2.1.b.v supervision requirements;
      2.1.b.vi educational resources and capacity;
   These must be monitored, reviewed and evaluated systematically. When an issue is identified it must be documented and dealt with promptly;
   2.1.c pre-registration tutors evaluating trainees. To do this, tutors must have access to reliable evidence about a trainee’s performance. Tutors must be competent to assess the performance of trainees;
   2.1.d the quality and development of pre-registration tutors.

Standard 3 – Equality, diversity and opportunity

3. Initial pharmacy education and training must be based on principles of equality, diversity and fairness. It must meet the requirements of all relevant legislation.

3.1 systems and policies for capturing equality and diversity data. Concerns should be documented, addressed and disseminated;
3.2 strategies for staff training in equality and diversity
Standard 4 – Selection of students and trainees

4. Selection processes must be open, fair and comply with relevant legislation. Processes must ensure students and trainees are fit to practice at the point of selection. Selection includes recruitment and admissions.

4.1 Selection process must give applicants the information they need to make an informed application.

4.2 Selection criteria must be explicit. They should include:

4.2.a meeting academic and professional entry requirements;
4.2.b meeting English language requirements appropriate to MPharm degree study. Guidelines issued by English language testing bodies should be followed to ensure that admissions language requirements are appropriate;
4.2.c meeting numeracy requirements;
4.2.d taking account of good character checks, such as Criminal Records Bureau (CRB)/Disclosure Scotland checks;
4.2.e passing health checks (subject to reasonable adjustments being made). Health checks could include self-evaluations and/or evaluations by healthcare professionals;
4.2.f recognising prior learning, where that is appropriate

4.3 Selectors should apply selection criteria fairly. They should be trained to do this. Training should include equality and diversity matters

Standard 5 – Curriculum delivery

5. The curriculum for MPharm degrees and the pre-registration scheme must deliver the outcomes in Standard 10. Most importantly, curricula must ensure students and trainees practice safely and effectively.

5.1 Curricula must be integrated.

5.2 Curricula must be progressive, dealing with issues in an increasing more complex way until the right level of understanding is reached

5.3 An MPharm must be delivered in an environment which places study in a professional and academic context and requires students to conduct themselves professionally. Pre-registration must be delivered in a professional environment which requires trainees to conduct themselves professionally.

5.4 An MPharm must be delivered in an environment informed by research. This means that whether or not all staff are engaged in research, their teaching must be informed by research.

5.5 An MPharm degree teaching and learning strategy must set out how students will achieve the outcomes in Standard 10. Learning opportunities must be structured...
to provide:

5.5.a an integrated experience of relevant science and pharmacy practice;
5.5.b a balance of theory and practice;
5.5.c independent learning skills.

5.6 The MPharm degree curriculum must include practical experience of working with patients, carers and other healthcare professionals. Practical experience should increase year on year.

5.7 There must be a clear assessment strategy for the MPharm degree. Assessment methods must measure the outcomes in Standard 10.

5.8 The MPharm degree assessment strategy should include:

5.8.a diagnostic assessments;
5.8.b formative assessments;
5.8.c summative assessments;
5.8.d timely feedback.

5.9 Academic regulations must be appropriate for a degree that is both academic and professional and may lead to further professional training. As a general principle, all assessments must be passed. This means that condonation, compensation, trailing, extended re-sit opportunities and other remedial measures should be extremely limited, if they are permitted at all. MPharm degree academic regulations may be more stringent than university norms. This may include higher than usual pass marks for assessments demonstrating knowledge and skills essential to safe and effective pharmacy practice.

5.10 Marking criteria must be used for all assessments and all pass criteria must reflect safe and effective practice.

5.11 Patient safety must be paramount in assessments: any evidence of an assessment demonstrating unsafe practise must result in failure.

5.12 A pre-registration training plan must describe how the learning outcomes for pre-registration will be delivered.

5.13 A pre-registration training plan must describe all assessments, including tutor evaluations and tutor sign-offs.
Standard 6 – Support and development for students and trainees

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

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

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

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

7.1. There must be a range of mechanisms in place to support anyone delivering initial education and training to develop in their role.

7.2. Induction programmes are provided for tutors and university staff as appropriate. This should include induction programmes for non-pharmacists working on MPharm degrees.

7.3. Everyone involved in delivering the curriculum should have:
   7.3.a effective supervision;
   7.3.b an appropriate and realistic workload;#
   7.3.c effective personal support;
   7.3.d mentoring;
   7.3.e time to learn;
   7.3.f continuing professional development opportunities.

7.4. Tutors have an identified source of peer support.

Standard 8 – Management of initial education and training

8. Education and training must be planned and maintained through transparent processes which must show who is responsible for what at each stage

8.1. All education and training will be supported by a defined management plan with:
   8.1.a a schedule of responsibilities
   8.1.b defined structures and processes to manage the delivery of education and training
Standard 9- Resources and capacity

9. Resources and capacity are sufficient to deliver outcomes.

9.1 There must be:
9.1.a robust and transparent mechanisms for securing an appropriate level of resource for delivering an MPharm degree
9.1.b sufficient staff from relevant disciplines to deliver the curriculum to students and trainees. Staff must be appropriately qualified and experienced. The staffing profile must include:
   9.1.b.i sufficient numbers of pharmacists – registrants of the GPhC – with experience of teaching in higher education to ensure that an MPharm degree can produce students equipped to enter pharmacist pre-registration training in Great Britain.
   9.1.b.ii sufficient numbers of pharmacists to act as tutors and professional mentors at university and in pre-registration. Not all personal tutors must be pharmacists.
   9.1.b.iii pharmacists who are leaders in the profession and in their university, who can influence university policy relevant to pharmacy
   9.1.b.iv non-pharmacist academics who can influence school and university policy relevant to pharmacy
   9.1.b.v staff who are sufficiently experienced to supervise research. It would be unusual for anyone to supervise research at a particular level unless they had researched to that level or beyond. New research supervisors must be mentored and signed off as being fit to supervise after a period of mentoring
   9.1.b.vi science academics who understand the relevance of their discipline to pharmacy and deliver their area of expertise in a pharmaceutical context
   9.1.b.vii academic pharmacists and other experienced MPharm degree staff who are able to act as mentors to non-pharmacist colleagues
9.1.c pre-registration tutors who meet the GPhC’s standards for pre-registration tutors.
9.1.d career pathways in universities for all staff teaching on MPharm degrees, including pathways for practice staff
9.1.e clear lines of authority and responsibility for the strategic organisation and day-to-day management of placements
9.1.f training and ongoing support for all non-pharmacists involved in the delivery of MPharm degrees which must help them understand:
   9.1.f.i help and understand the relevance of their work to pharmacy
   9.1.f.ii how to deliver their area of expertise in a pharmaceutical context
9.1.g appropriate learning resources
9.1.h accommodation and facilities that are fit for purpose
9.1.i pre-registration premises which meet the GPhC’s standards for pre-registration premises
Outcomes for the initial education and training of pharmacists

10.1 Expectations of a pharmacy professional

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

10.2 The skills required in practice

10.2.1 Implementing health policy

<table>
<thead>
<tr>
<th>Learning outcome</th>
<th>MPharm</th>
<th>Pre-reg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a.</strong> Promote healthy lifestyles by facilitating access to and understanding of health promotion information</td>
<td>Shows how</td>
<td>Does</td>
</tr>
<tr>
<td><strong>b.</strong> Access &amp; critically evaluate evidence to support safe, rational &amp; cost effective use of medicines</td>
<td>Shows how</td>
<td>Knows how</td>
</tr>
<tr>
<td><strong>c.</strong> Use the evidence base to review current practice</td>
<td>Shows how</td>
<td>Does</td>
</tr>
<tr>
<td><strong>d.</strong> Apply knowledge of current pharmacy-related policy to improve health outcomes</td>
<td>Knows how</td>
<td>Shows how</td>
</tr>
<tr>
<td><strong>e.</strong> Collaborate with patients, the public and other healthcare professionals to improve patient outcomes</td>
<td>Knows how</td>
<td>Shows how</td>
</tr>
</tbody>
</table>
### 10.2.2 Validating therapeutic approaches and supplies prescribed and over-the-counter medicines

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

### 10.2.3 Ensuring safe and effective systems are in place to manage risk inherent in the practice of pharmacy and the delivery of pharmaceutical services

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

10.2.4 Working with patients and the public

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

10.2.5 Maintaining and improving professional performance

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

A1.1 How medicines work

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

Applied Physical, Chemical and Biological sciences
- Sources and purification of medicinal substances
- Physicochemical characteristics of drugs and biological systems
- Thermodynamics and chemical kinetics
- (Bio)Analytical principles and methods
- Drug design and discovery
- Cell and molecular biology
- Biochemistry
- Genetics
- Microbiology
- Immunology
- Pharmaceutical chemistry
- Drug identification
- Drug synthesis
Pharmacology, pharmacokinetics & pharmacodynamics

- Contraindications, adverse reactions and drug interactions
- ADME
- Prediction of drug properties
- Pharmacogenetics and pharmacogenomics
- Drug and substance misuse
- Clinical toxicology and drug-over-exposure
- Molecular basis of drug action
- Metabolism

Pharmaceutical technology including manufacturing & engineering science

- Biotechnology
- Manufacturing methods
- Quality assurance processes
- Sterilisation and asepsis
- Environmental control in manufacturing

Formulation and material science

- Materials used in formulations and devices
- Biopharmaceutics, developmental pharmaceutics, pre-formulation and formulation studies
- Design and standardization of medicines
- Microbiological contamination
- Contamination control
- Product stability
- Medical devices
A1.2 How people work

Normal & abnormal structure & function
- Nutrition
- Physiology
- Pathology
- Infective processes

Sociology
- Social and behavioural science

Health psychology
- Health promotion
- Disease prevention
- Behavioural medicine

Objective diagnosis
- Differential diagnosis
- Symptom recognition
- Diagnostic tests

Epidemiology
- Aetiology and epidemiology of (major) diseases
A1.3 How systems work

Healthcare management
- Public health
- Organisations: NHS, DH, govt priorities
- Other professionals
- Health care systems

Evidence-based practice
- Health information systems/ resources
- Health policy and (pharmaco)economics

Professional regulation
- Legislation
- Professional ethics and fitness to practise
- Sale and supply of medicines
- CPD
- Political and legal framework

Medicines regulation
- Evaluation and regulation of new drugs and medicines
- Pharmacopoeial specifications and biological standards
- Medicines licensing
- Product quality, safety and efficacy
- The supply chain
- Packaging, labelling and patient information

Clinical governance
- SOPs
• Research methodology / research ethics
• Risk & quality management
• Good manufacturing/dispensing practice
• Good clinical practice
• Health policy, clinical and science research methods

Clinical management
• Disease management
• Chronic medicines management
• Medicines use review
• Care planning

Workplace Regulation
• Health & Safety
• Sexual boundaries
• Independent Safeguarding Authority
• Data protection
• FOIA
• Consumer protection incl. complaints procedures

A1.4 Core and transferable skills

Professionalism

Research and research methods

Critical appraisal
• Audit and learning from errors

Problem solving
• Study skills
• Team-working skills
Clinical decision making
  • Leadership skills

Accurate record keeping

Reflective practice (incl. continuing professional development)

Effective communication
  • Interpersonal skills
  • Medical terminology

Interpret & interrogate clinical data

Analyse & use numerical data

Pharmaceutical numeracy

Technological literacy

A1.5 Attitudes and values

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