University of Sunderland
Report of a reaccreditation event
July 2018
## Event summary and conclusions

<table>
<thead>
<tr>
<th>Provider</th>
<th>University of Sunderland</th>
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<tbody>
<tr>
<td>Course</td>
<td>Masters of Pharmacy degree (MPharm)</td>
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<tr>
<td>Event type</td>
<td>Reaccreditation</td>
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<tr>
<td>Event date</td>
<td>09-10 July 2018</td>
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<tr>
<td>Accreditation period</td>
<td>2017/18 – 2023/24</td>
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<tr>
<td>Outcome</td>
<td>Approval&lt;br&gt;The accreditation team agreed to recommend to the Registrar of the General Pharmaceutical Council (GPhC) that the MPharm degree provided by the University of Sunderland should be reaccredited for a further period of six years, with an interim event to take place in three years.</td>
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<tr>
<td>Conditions</td>
<td>There were no conditions</td>
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<tr>
<td>Standing conditions</td>
<td>Please refer to Appendix 1</td>
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<td>Recommendations</td>
<td>No recommendations were made</td>
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<tr>
<td>Registrar decision</td>
<td>Following the event, the Registrar of the GPhC accepted the accreditation team’s recommendation and approved the reaccreditation of the programme for a further period of 6 years.</td>
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<tr>
<td>Key contact (provider)</td>
<td>Andrew Sturrock, MPharm course leader</td>
</tr>
<tr>
<td>Accreditation team</td>
<td>Mr Peter Curphey (Team leader), Pharmacy Consultant&lt;br&gt;Dr Geoff Hall (Academic), former Associate Head of Leicester School of Pharmacy, De Montfort University&lt;br&gt;Dr Ruth Edwards (Academic), Lecturer, Robert Gordon University&lt;br&gt;Professor Anne Watson (Pharmacist), Postgraduate Pharmacy Dean, NHS Education for Scotland&lt;br&gt;Mr Ian Smith (Academic), Lecturer in Pharmacy Practice, Keele University&lt;br&gt;Mrs Samantha Amos (Recently registered pharmacist), Senior Clinical Pharmacist, Maidstone and Tunbridge Wells NHS Trust&lt;br&gt;Mrs Fiona Barber (Lay member), Independent Member, Leicester City Council</td>
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<tr>
<td>GPhC representative</td>
<td>Ms Joanne Martin, Quality Assurance Manager, GPhC</td>
</tr>
<tr>
<td>Rapporteur</td>
<td>Dr Ian Marshall, Emeritus Professor of Pharmacology, University of Strathclyde; Proprietor, Caldarvan Research (Educational and Writing Services)</td>
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</table>
Introduction

Role of the GPhC

The General Pharmaceutical Council (GPhC) is the statutory regulator for pharmacists and pharmacy technicians and is the accrediting body for pharmacy education in Great Britain. The GPhC is responsible for setting standards and approving education and training courses which form part of the pathway towards registration for pharmacists. The UK qualification required as part of the pathway to registration as a pharmacist is a GPhC-accredited Master of Pharmacy degree course (MPharm). This reaccreditation event was carried out in accordance with the GPhC’s 2011 MPharm Accreditation Methodology and the course was reviewed against the GPhC’s 2011 education standards ‘Future Pharmacists: Standards for the initial education and training of pharmacists’.

The GPhC’s right to check the standards of pharmacy qualifications leading to annotation and registration as a pharmacist is the Pharmacy Order 2010. It requires the GPhC to ‘approve’ courses by appointing ‘visitors’ (accreditors) to report to the GPhC’s Council on the ‘nature, content and quality’ of education as well as ‘any other matters’ the Council may require.

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

Background

Pharmacy has been taught at the University of Sunderland since 1921. The MPharm programme is delivered by the School of Pharmacy and Pharmaceutical Sciences within the Faculty of Health Sciences and Wellbeing. The last full accreditation visit was undertaken in June 2011. The School was the first to be accredited against the GPhC’s then newly introduced Standards for the Initial Education and Training of Pharmacists (2011). Based on the outcome of the 2011 visit, the degree was accredited for a full six years with no conditions or recommendations. A pilot interim visit took place at the University in 2014, followed by a full interim visit in 2015. At this interim visit, the team was satisfied the course was continuing to meet the standards set in the GPhC’s standards for the initial education and training of pharmacists. The team saw very good evidence that there had been progress made since 2011. There were no additional conditions or recommendations as a result of this interim visit and the judgement made by the accreditation team in 2011 remained in place.

Documentation

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

Pre-visit

Observers

Ms Farwah Bukhani, (recently registered pharmacist), in training
Mr Alastair Paterson, (pre-registration trainee), in training
Mr Daniel Greenwood, (recently registered pharmacist), in training
Mr Chris McKendrick, Quality Assurance Officer, GPhC
In advance of the main visit, a pre-visit meeting took place at the University on 18 June 2018. The purpose of the pre-visit meeting was to prepare for the event, allow the GPhC and the University to ask any questions or seek clarification, and to finalise arrangements for the visit.

The event

The event began with a private meeting of the accreditation team and GPhC representatives on 9 July 2018. The remainder of the event took place onsite at the University of Sunderland on 9-10 July 2018, and comprised a series of meetings with staff and students of the University and included a tour of the University facilities.

Declarations of interest

There were no declarations of interest.

Key findings

Standard 1: Patient and public safety

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

University processes, policies and Fitness to Practise procedures are in place to ensure that students do not jeopardise patient safety. Students are made aware of these systems during Induction and informed of the University’s stance and right to terminate a student’s education in light of inappropriate conduct or health which may risk the safety of patients irrespective of successful academic assessment achievements. Prior to placements, again within Induction Week, the importance of appropriate dress is described to the students to prevent any health or safety risk in the context of infection control as well as to impress upon students how they should be professionally presented when meeting patients or other healthcare professionals. Any student who demonstrates behaviour or develops health problems that have the potential to adversely affect patient safety will become subject to the Fitness to Practise procedures. Students interviewed told the team that they were aware of the Fitness to Practise policies and procedures. In the placements, students are under constant supervision; in some cases, the supervisor may not be a pharmacist but a senior technician or pre-registration pharmacist. Students are not left alone at any time and, therefore, cannot get into a situation where they may attempt to carry out tasks without being fully supervised. In clinical skills sessions, to deal with situations where students may be new to the process of consultation and physical examination, simulated patients are used for initial interactions followed by students being allowed to use as subjects each other or standardised patients that are aware of the skill level of the students in question. The University manages risk by requiring that all student activities are risk assessed and appropriately supervised, including all patient-facing activity, both on and off-site. Pharmaceutical calculations are a potential cause for concern with regard to patient safety, and students have the opportunity at each Stage of the programme to ensure that their skills in this area are appropriate and consistent with safe practice. In each Stage there are assessments which include critical elements relating to patient safety; if students fail in such an element they will be referred in the assessment and, therefore, the module. The application of the GPhC “Standards for Pharmacy Professionals” is emphasised in the Placement Handbook with respect to student behaviour and conduct whilst on placement.

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

All criteria relating to this standard are met.
In realising a new (2016) Strategic Plan, the University was restructured from six to five academic faculties with the MPharm programme sitting within the Faculty of Health Sciences and Wellbeing (FHSW) which comprises the Schools of Medicine, of Nursing and Health Sciences, of Pharmacy and Pharmaceutical Sciences, and of Psychology. The School of Pharmacy and Pharmaceutical Sciences provides, in addition to the MPharm, the PGDip/MSc OSPAP programme, and an independent prescribing programme, all accredited by the GPhC, plus BSc degrees in Biopharmaceutical Sciences, Cosmetic Sciences, Medicinal Chemistry, and Biochemistry, along with MSc degrees in Drug Discovery and Development, and Pharmaceutical and Biopharmaceutical Formulation. The Head of School is responsible for liaison with the GPhC. Team Leaders associated with the academic staff that support and deliver the UoS MPharm are all members of the Faculty Academic Committee (FAC) and, as such, are aware of all relevant information passed down from the Faculty Executive, including detailed financial information. Team Leaders perform the role of functional and operational line management of a team of academics in line with the University Strategic Plan, carrying out staff appraisal and development, ensuring fair and transparent work loading, and holding regular communication meetings. In terms of quality assurance, the MPharm Programme Leader completes an annual Programme Review Portfolio report that is discussed at the Module/Programme Studies Board with relevant items being reported through to Faculty Academic Committee (FAC) and from there to Quality Management Sub-Committee (QMSC) and Student Success Committee (SSC). The Academic Quality Office oversees the operation of academic quality systems and procedures and provides help and guidance to Faculties on all academic quality issues. The core quality assurance processes to ensure that an appropriate threshold level is reached in both the academic standards of the programmes offered and the quality of students’ academic experience are programme approval, annual review, periodic review and the use of external examiners. External examiners are required to assure the quality and standards of assessment at the level of the award, approving examination questions, being consulted on coursework, and sampling the assessment of work; the team noted that comments from external examiners were universally positive. All student feedback informs improvements and developments to the programme, with the views of students collected through module questionnaires, Staff Student Liaison Committee meetings, Module/Programme Studies Board meetings and informally. In the June 2017 GPhC Registration Examination, 93.1% of students from the University of Sunderland passed; Sunderland was the highest-ranking School of Pharmacy in this sitting. Placement provision falls under the UoS Work-Based Learning policies, under which all placement sites are audited by academic staff on a rolling schedule basis. Placements are paid for and are structured to ensure that they are progressive and integrated within the MPharm programme, with service level agreements (SLAs) which are annually reviewed and renewed in place with all the regional providers to ensure sufficient placements to service the programme. Placements operate using a two-way feedback mechanism in which students and mentors complete online feedback for every session on various aspects of their experience. Students are supervised whilst on placements by external practitioners, paid for by the University; associated costs are included in the Faculty financial modelling process. There are annual Stakeholder meetings to review and update placement provision to ensure that the working model best implements effective delivery, student learning experience/opportunity and assessment.

**Standard 3: Equality, diversity and fairness**

**All criteria relating to this standard are met.**

The University aims to have an inclusive environment for the student and staff community to help all achieve their potential. The Faculty of Health Sciences and Wellbeing comprises a diverse staff and student community and there is considerable experience of working within a single equality scheme. There is also a Faculty level Equality, Diversity and Social Responsibility (EDSR) Group that meets quarterly, feeding in to the University EDSR; this group focuses on Faculty- and School-specific issues and has both staff and student representation from each School in the Faculty, including a School representative who is the point of contact for students and staff to raise concerns. The University has a commitment to monitor the equality and diversity profile of staff and students, to capture and analyse recruitment and selection applications and outcomes and monitor student attainment to identify areas of concern with respect to equality and diversity policies, and publishes a comprehensive Equality and
Diversity Annual Report which includes information on the School’s equality and diversity activities, progress against the Equality and Diversity Action Plan and equality profile data analysis on the staff and student population; this includes data on students with disabilities. The MPharm has been designed to consider equality and diversity and includes interaction with culturally diverse patient groups and professionals. All staff members attend induction sessions when they first join the University, where they are given training with regards to equality, diversity and fairness, and all staff members involved in selection of new staff are required to attend University of Sunderland Fair and Effective Recruitment and Selection training. Aspects of equality and diversity training are introduced to students during induction and are taught and developed in the professional practice modules with a particular emphasis on unconscious bias, and are fully integrated into case studies; thus, the team learned that English patient names in case studies have been replaced by initials. As part of the reflective portfolio students are required to reflect on their attitudes and perspectives arising from interactions with a diverse range of patients, carers, professionals and peers, either as individuals or in a team.

**Standard 4: Selection of students and trainees**

All criteria relating to this standard are met.

Open days are scheduled regularly throughout the year, with programme specific information delivered by the Programme Leader or a deputy, and the Admissions Tutor. The programme team has a schedule for regular visits to local and regional Schools and Colleges, whereby potential students can meet staff and discuss in detail programme content and the application process. Where possible, interviews are held in conjunction with the University’s Applicant Days, where students are able to attend talks from central university on finance and accommodation, as well as receiving a tour of the campus and the opportunity to talk to both staff and current students. The team was told that eligible home applicants are invited for an interview that includes calculations and follows the principles of values-based recruitment; it is planned to roll out the interview process to overseas applicants in the current year using Skype and shared screens. As part of the Fitness to Practise procedures, two self-declaration forms must be completed prior to admission, covering health and personal good conduct. In addition to the academic entry requirements for 2018/19 entry, all home students were required to attend an interview assessment day where they underwent a values-based recruitment process which was used to assess and evaluate numeracy skills and professional attributes. During clearing, students will be invited to the clearing open day for interview. The interview process for European and overseas applicants for 2018/19 entry has been piloted via Skype and the outcomes are currently under evaluation. It is intended that all applicants will have an interview prior to admission for 2019/20 entry. For UK students, a Disclosure and Barring Service (DBS) check is required, whereas for overseas students, a Certificate of Good Conduct from the domicile police force is required; this is superseded by a DBS check six months after starting the programme. Students are required to complete a declaration each academic year, covering both health and good conduct. Due to the integrated nature of the MPharm programme and the spiral curriculum students must all enter the programme at Stage 1. The University ensures that staff involved with the admissions process, including but not limited to interviews, decision-making etcetera, are professional and receive appropriate training and development in admissions and related areas.

**Standard 5: Curriculum delivery and student experience**

All criteria relating to this standard are met.

The School was the first School of Pharmacy to be accredited against the 2011 GPhC IET Standards. Since that time, the programme team has reflected on the strengths and weaknesses of the existing programme
and its evolutions since 2011. In particular, the team was told that the programme team had considered, on the basis of a thorough analysis of all marks for every question set, that at first year level students were able to pass the then large modules while omitting important aspects of basic scientific principles; this had led to problems of understanding later in the programme. Students interviewed agreed with this analysis and were in favour of the resultant changes to the programme. As a result, the learning outcomes across the programme have been reviewed, leading to the design of the new MPharm course made up largely of somewhat smaller modules than in the 2011 programme. Nevertheless, the team was told that progression is good overall, but success at the first attempt in Stages 2 and 3 has been lower than the sector norm. However, the University’s graduates were the most successful from a School of Pharmacy in the 2017 GPhC Registration Assessment with a 93% pass rate, 15% above the national average. Integration in the new programme is achieved by introducing scientific concepts, typically via lectures, seminars/workshops, PBL and laboratory work, which are contextualised through seminars/workshops, PBL, case studies and simulation-based activities. At Stage 1 there is horizontal integration between the two scientific modules and the professional practice module contains a number of formal integration sessions where key concepts from the fundamental principles modules are applied to patient-focused cases. At Stage 2 the teaching scenarios introduced and developed in the simulated pharmacy classes and the associated examinations are closely aligned to the therapeutic content of the co-aligned integrated therapeutic modules. Dedicated integration seminars provide academic staff with opportunities to bring together modular content to highlight how scientific principles underpin patient care. At Stage 3 and 4, course material is fully integrated and students are themselves expected to demonstrate and apply knowledge from across the strands to patient focused cases. Thus, the underpinning principles of key elements of science are introduced at Stage 1 providing a foundation for further development and application as the course progresses with integration sessions on clinical cases taught by a multidisciplinary team. At Stages 2, 3 and 4 the integrated therapeutics modules provide a central discussion around various disease states to which the various aspects of science are used to inform clinical practice. This approach facilitates the integrated discussions on how a disease is managed in practice. Numeracy and communication skills are a feature of the programme throughout. Stage 3 also includes a research project that runs through the entire academic year. In Stage 4 the principles of oncology and infectious diseases are studied, with an overall strong emphasis on interprofessional education and experiential learning. A central aim of the curriculum design is to ensure integration between all elements of teaching and assessment. This includes pharmaceutical chemistry, pharmaceutics, biological sciences and pharmacological aspects of science underpinning the clinical, legal, ethical and professional aspects of practice. Fundamental principles are developed in Stage 1 of the programme, with patient-centred problems progressively building in complexity through the Stages. Twenty three individual strands have been developed to ensure the delivery of an integrated, spiral and progressive curriculum intended to meet both the indicative syllabus and Standard 10 outcomes. Thus, each module descriptor has been updated for the new programme to include a section highlighting the integration of knowledge of scientific principles to the care of patients. Students are required to conduct themselves in a professional manner, complying with high standards of conduct requirements for all students both on and off campus, with well-defined student disciplinary procedures. The level of required student understanding of professional behaviour is introduced during induction and reinforced throughout the programme. Practical experience of working with patients, carers and other healthcare professionals is provided through placement activity, clinical skills, inter-professional education, simulated learning activities and patient-centred workshops. There is a well-established and extensive placement programme delivered through collaboration with a range of over 100 partner organisations including NHS trusts, primary care providers, community pharmacy and specialist sector organisations. There is a significant commitment to the engagement of service users and carers, with a full-time member of academic staff taking responsibility for activity across the Faculty; there is currently access to over 140 Patient Carer and Public Involvement (PCPI) contributors covering a wide range of medication and disease state experience. This activity has involved the engagement of a range of patient groups and development of an ethical and legal framework for their work with students. Simulation techniques are used to support the delivery of clinical teaching incorporating SimMan 3G technology and now also utilise the newly developed Living Lab facilities; student feedback on the benefits of simulation activities has been instrumental in furthering this approach to teaching and learning. Current IPE activity involves MPharm students working with students
from medical, dental, adult nursing, psychology, counselling, biomedical science, public health, and speech and language therapy programmes. As Faculty teaching programmes expand it is anticipated that opportunities will exist for IPE development with students from paramedic practice, learning difficulty and mental health nursing, child and midwifery nursing, sport and exercise science, occupational therapy and podiatry. The overall aim of the assessment strategy is to use a variety of methods of assessment, enabling students to demonstrate their integrated knowledge base in a variety of fora and their ability to interpret and evaluate information in concert with the clinical and communication skills necessary for practice as a pharmacist. Thus, each of the 58 GPhC Outcomes from Standard 10 has been aligned to a specific learning objective and assessment. The range of assessments is also an attempt to address the numerous learning styles present within the diverse programme cohort and allow all students to fully demonstrate their academic ability. Assessment techniques include end of year integrated written examinations, time-constrained tests, MCQ/EMQs, oral and poster coursework presentations, laboratory practical coursework, practical examinations, Objective Structured Clinical Examinations (OSCE), written reports, reflective portfolio, numeracy and VLE (Canvas) testing and are designed to deliver the learning outcomes of Standard 10. In general, assessments become more complex as the programme progresses with greater emphasis on problem-solving and independent working. Assessed coursework is returned to students together with written/audio feedback no later than four weeks after the submission deadline. The programme has a number of programme-specific regulations which are different to, and more stringent than, the University generic assessment regulations for undergraduate programmes. Students will not be awarded an accredited MPharm degree if they are deemed unsafe for practice and may constitute a threat to the public. The team was told that the teach-out of the existing programme will involve Stage 1 students having their first summative assessment attempt in May, with referred assessments being held in July. An additional refer assessment will be held in September with any fails at that stage being required to complete all 120 credits of the same stage of the new programme.

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

All criteria relating to this standard are met.

Students are offered a range of academic and personal support ranging from induction on arrival at University to on-going pastoral and personal tuition, undertaking personal development planning and advice on careers and employability. The University provides a range of professional support services including health and wellbeing, counselling, disability support, and a chaplaincy. Language and numeracy support is available centrally throughout the academic year should it be necessary, helping to support students with any difficulties. There is also an International Office which supports students with, for example, visa issues. The team learned that NSS scores have fallen slightly over the past four years, a decline which the teaching team ascribes to the challenging nature of the programme. Each student is allocated an academic personal tutor to provide pastoral support and signposting in the development of individual learning needs. This pastoral support mechanism is used widely by students, especially with issues based on culture, communication and integration. Additionally, the University Gateway provides assistance to students and links closely to the Programme Support team and academic staff to ensure that students are directed to the correct support service, as quickly as possible, minimising any impact on their studies. The MPharm has minimum attendance requirements to foster professional values, attitudes and behaviours. Student attendance is monitored by Academic Registry with weekly reports provided to academic tutors and the Programme Leader. Pastoral support through Student Journey and/or academic staff is provided to understand issues with student engagement and promote attendance requirements. Persistent poor attendance can be escalated to Fitness to Practise and ultimately student withdrawal. As part of the TP/AT staffing base there are staff members that are involved in the Oriel assessment, act as pre-registration tutors, are involved in corporate selection processes and the education and training of pre-registration trainees. Students interviewed spoke highly of the level of both academic and pastoral support, and of the approachability and accessibility of staff members.
Standard 7: Support and development for academic staff and pre-registration tutors

All criteria relating to this standard are met.

The University’s Academic Review and Development Framework annual appraisal process provides an overarching mechanism through which the training, support and performance of academic staff is continually supported, reviewed and delivered. Appraisals are conducted as a collaborative approach between the member of academic staff and their line manager. A range of staff development opportunities exist through a core programme of activities within the University targeted to help the development of all staff activities including learning and teaching, assessment, research, administration, management and health and safety. Specific training is also supported outside the University; for example, attendance at relevant training courses and conferences (scientific, education and professional practice) to develop discipline specific skills; a central Faculty budget is maintained for such professional development opportunities. Peer observation of teaching operates as a purely developmental process, not part of appraisal or performance management, designed to assist both the observer and the colleague observed in considering, supporting and promoting good practice and informally identifying requirements for professional development. All new staff members undergo a generic induction programme regardless of job description and full-time equivalence of appointment. Within the Faculty, line managers are responsible for ensuring that there is a specific, tailored induction programme relevant to School and Faculty. Induction is normally structured around orientation, activities and operations and more specifically the employee’s role and expectations and any relevant initial training and development needs. The induction process forms one component of the formal probation process where the line manager agrees roles, objectives and staff development requirements for a new member of staff. Orientation to the profession and practice of pharmacy is carried out by one of the registered pharmacy practice staff. Non-pharmacist members of staff are supported to understand, deliver and develop teaching resources to emphasise the integrated pharmaceutical aspects and use relevant teaching examples and contextualisation. Academic staff members take responsibility for mentoring newly appointed staff, supporting integration into the School, Faculty and University as well as offering support and direction in teaching and research. The School is organised into two academic staff teams; Pharmacy Practice & Clinical Therapeutics, and Pharmaceutical Sciences, each with a team leader responsible for line management of all staff within their respective teams, including associated academic tutors and teacher-practitioners. An Academic Workload Planning Framework provides a structure and a series of principles designed to enable an equitable, transparent and consistent approach to the allocation and management of academic staff workloads within Faculties across the University. Academic workload is agreed between members of staff and their team leader and is reflected upon throughout the academic year as changes to working patterns occur. Academic staff told the team that although the new programme would increase workload in the short term there had been sufficient time to allow planning for the extra work involved.

Standard 8: Management of initial education and training

All criteria relating to this standard are met.

The Head of School has ultimate responsibility for all programmes in the School. The MPharm Programme Leader is directly responsible for the day-to-day running of the programme; coordination and delivery of the MPharm is further supported by the four Stage Leaders, supported by the other seven Module Leaders, the Admissions Tutor and Placement Co-ordinator. Line management responsibility for all teaching staff within the School lies with the two team leaders. A member of staff is responsible for the development and management of interprofessional education and patient centred activities on the programme. University Fitness to Practise is led by the Professor of Nursing and Continuing Professional Development, with a School nominated MPharm/OSPAP Fitness to Practise lead. The programme is
supported by a Programme Administrator who coordinates all administrative matters. Placement activity is supported by the placement administrators. Academic technical support is managed for the Faculty by a Technical Operations Manager through discipline-specific team leaders and associated staff. The programme operates under the University Academic Regulations for Undergraduate Programmes and MPharm Programme Specific Regulations. The programme is managed and quality assured through the University’s standard processes. A new VLE (Canvas), managed by Centre for Enhancement of Learning and Teaching (CELT) has been introduced for the 2017-18 academic year; the new programme utilises the capabilities of Canvas, with dedicated module and programme spaces and enhanced functionality compared to the previous VLE. There are systems in place to monitor attendance at all classes using an attendance monitoring system (TDS) that provides real time student attendance monitoring data, requiring students to swipe into timetabled sessions using University Student Cards.

Standard 9: Resources and capacity

All criteria relating to this standard are met.

There has been significant investment over recent years in completing Phase I and Phase II of the Sciences Complex and purchase and redevelopment of Shackleton House, plus there is an upcoming Phase III development of the Sciences Complex for which financial support has recently been confirmed with work beginning in January 2019 for completion in September 2019. This will be complemented by additional associated capital equipment expenditure. The aim is to create an infrastructure to support and enhance the capability to deliver growth in patient-centred teaching aligned with the future structure of regional, national and international healthcare systems. The continued approach to integrating elements of all the health-based programmes has resulted in an efficient use of specialist facilities and offers opportunity for shared interdisciplinary learning and training opportunities, with MPharm teaching being fully integrated into the refurbished teaching environment. The team visited the new accommodation, completed since the interim visit, and including a dispensary/simulated pharmacy with an innovative waiting area for patients, an OSCE suite, a hospital ward environment with simulation manikins, and a problem-based learning debriefing room. The team also visited new science teaching laboratories, one equipped for teaching of biosciences and microbiology and another for pharmaceutics, replete with tableting facilities, and a mock hospital ward facility with an innovative patient and carer dedicated apartment. The team agreed that the facilities were of excellent specification. Completion of Phase 3 development will conclude current redevelopment of the Sciences Complex buildings. The University undertakes an annual planning cycle resulting in an agreed rolling budget for the following three financial years. The Faculty budget is negotiated between the Academic Dean, Director of Finance and the University’s Executive Board. Three year rolling student intake targets are agreed with the University Executive Board in January and are used to inform the budgeting cycle. The financial budget is held at a Faculty Level and is allocated to various lines of expenditure including staff spend, including academic pharmacist practitioners, service level agreements and academic tutor staff, non-staff spend, placement provision, capital expenditure, etc. Expenditure is managed through Financial Services with all expenditure against the Faculty budget currently authorised by the Dean of Faculty. The Faculty of Health Sciences and Wellbeing currently comprises the Dean of Faculty, four Heads of School, eight Team Leaders, and 139 academic staff comprising five Professors, eight Readers, eight Principal Lecturers, 98 Senior Lecturers (2 additional new starts 1/08/2018) and seven Lecturers. Within this resource, there are 20 GPhC-registered pharmacists and three staff who hold a non-UK pharmacy degree as part of the permanent academic staff; the contracted external practitioners constitute 11 registered pharmacists, one pharmacy technician and two pre-registration trainees. There are also a number of other external practitioners utilised on an ad hoc basis to deliver specialty classes. The programme is primarily taught by staff from within the School of Pharmacy and Pharmaceutical Sciences encompassing the Pharmacy Practice and Clinical Therapeutics Team and the Pharmaceutical Sciences Team with additional support from other staff within the Faculty. Research-active staff members contribute to the learning and teaching experiences of students, ensuring that most topics are delivered by experts in the field. Staff from the School of Nursing and Health Sciences offer significant support regarding the clinical content of the MPharm programme; this is managed.
through a dedicated Senior Lecturer in Clinical Skills, of paramedic background, in the Pharmacy Practice and Clinical Therapeutics Team with a further appointment to be made late in 2018. The clinical skills components cover a range of skills from the basics to more advanced patient examination and assessment.

### Standard 10: Outcomes

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

The team had scrutinised the learning outcomes in discussions with the staff in meeting 4. Rather than examining each of the 58 outcomes, four outcomes (10.1.f, 10.2.2.f, 10.2.3.b, 10.2.3.e) had been selected for detailed discussion; the University of Sunderland staff members had been unaware of the outcomes to be discussed before the meeting. For each of the four 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 will be met at the required level; the team was confident that all other outcomes will 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; other discussions in meetings 2, and 3 had also addressed many of these outcomes. Thus, the team was satisfied that standard 10 is met.

### Indicative syllabus

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

The team agreed that the MPharm degree met the requirements of Directive 2005/36/EC of the European Parliament and of the Council on the recognition of professional qualifications for the initial education and training of pharmacists.
Appendix 1 - Standing conditions

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

1. The record and report include other comments from the team, and providers are required to take all comments into account as part of the accreditation process. The provider must confirm to the GPhC that required amendments have been made.

2. The provider must respond to the definitive version of the record and report within three months of receipt. The summary report, along with the provider’s response, will be published on the GPhC’s website for the duration of the accreditation period.

3. The provider must seek approval from the GPhC for any substantial change (or proposed change) which is, or has the potential to be, material to the delivery of an accredited course. This includes, but is not limited to:
   a. the content, structure or delivery of the accredited programme;
   b. ownership or management structure of the institution;
   c. resources and/or funding;
   d. student numbers and/or admissions policy;
   e. any existing partnership, licensing or franchise agreement;
   f. staff associated with the programme.

4. The provider must produce and submit to the GPhC on an annual basis:
   a. requested data on student numbers and progression and degree awards;
   b. requested information about the extent of human and physical resources it enjoys for the delivery and support of the degree course.

5. The provider must make students and potential students aware that successful completion of an accredited course is not a guarantee of a placement for a pre-registration year or of future employment as a pharmacist.

6. The provider must make students and potential students aware of the existence and website address where they can view the GPhC’s accreditation reports and the timetable for future accreditations.

7. Whenever required to do so by the GPhC, providers must give such information and assistance as the GPhC may reasonably require in connection with the exercise of its functions. Any information in relation to fulfilment of these standing conditions must be provided in a proactive and timely manner.

Appendix 2 – Standards

GPhC standards for the initial education and training of pharmacists

NB. Information that is shaded grey or shown in grey italics is only applicable to providers offering a 5-year MPharm degree with intercalated periods of pre-registration training.

Standard 1: Patient and public safety

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

1.1 There must be effective systems in place to ensure that students and trainees:
   1.1.a do not jeopardise patient safety;
   1.1.b only do tasks for which they are competent, sometimes under supervision;
   1.1.c are monitored and assessed to ensure they always practise safely. Causes for concern should be addressed immediately;
1.1.d have access to support for health, conduct and academic issues;
1.1.e must not be awarded an accredited degree or pass pre-registration training if they might pose a risk to patients or the public;
1.1.f understand what is and what is not professional behaviour and are familiar with the GPhC’s standards for pharmacy professionals (2017);
1.1.g understand what fitness to practise mechanisms apply to them. All schools of pharmacy must have fitness to practise procedures to deal with student causes for concern;
1.1.h undergo required health and good character checks;
1.1.i understand that it is an offence to impersonate a pharmacist. Pharmacists are registrants of the GPhC.

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

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

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

Standard 3: Equality, diversity and fairness

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

3.1 Systems and policies for capturing equality and diversity data. Concerns should be documented, addressed and disseminated;
3.2 Strategies for staff training in equality and diversity

Standard 4: Selection of students and trainees

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

4.1 Selection process must give applicants the information they need to make an informed application.
4.2 Selection criteria must be explicit. They should include:
   4.2.a meeting academic and professional entry requirements;
   4.2.b meeting English language requirements appropriate to MPharm degree study.
Guidelines issued by English language testing bodies should be followed to ensure that admissions language requirements are appropriate;

4.2.c meeting numeracy requirements;
4.2.d taking account of good character checks, such as Criminal Records Bureau (CRB)/Disclosure Scotland checks;
4.2.e passing health checks (subject to reasonable adjustments being made). Health checks could include self-evaluations and/or evaluations by healthcare professionals;
4.2.f recognising prior learning, where that is appropriate.

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

Standard 5: Curriculum delivery and the student experience

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

5.1 Curricula must be integrated.
5.2 Curricula must be progressive, dealing with issues in an increasing more complex way until the right level of understanding is reached.
5.3 An MPharm must be delivered in an environment which places study in a professional and academic context and requires students to conduct themselves professionally. Pre-registration training must be delivered in a professional environment which requires trainees to conduct themselves professionally.
5.4 An MPharm must be delivered in an environment informed by research. This means that whether or not all staff are engaged in research, their teaching must be informed by research.
5.5 An MPharm degree teaching and learning strategy must set out how students will achieve the outcomes in Standard 10. Learning opportunities must be structured to provide:
5.5.a an integrated experience of relevant science and pharmacy practice;
5.5.b a balance of theory and practice;
5.5.c independent learning skills.
5.6 The MPharm degree curriculum must include practical experience of working with patients, carers and other healthcare professionals. Practical experience should increase year on year.
5.7 There must be a clear assessment strategy for the MPharm degree. Assessment methods must measure the outcomes in Standard 10.
5.8 The MPharm degree assessment strategy should include:
5.8.a diagnostic assessments;
5.8.b formative assessments;
5.8.c summative assessments;
5.8.d timely feedback.
5.9 Academic regulations must be appropriate for a degree that is both academic and professional and may lead to further professional training. As a general principle, all assessments must be passed. This means that condonation, compensation, trailing, extended re-sit opportunities and other remedial measures should be extremely limited, if they are permitted at all. MPharm degree academic regulations may be more stringent than university norms. This may include higher than usual pass marks for assessments demonstrating knowledge and skills essential to safe and effective pharmacy practice.
5.10 Marking criteria must be used for all assessments and all pass criteria must reflect safe and effective practice.
5.11 Patient safety must be paramount in assessments: any evidence of an assessment demonstrating unsafe practise must result in failure.
5.12 A pre-registration training plan must describe how the learning outcomes for pre-registration will be delivered.

5.13 A pre-registration training plan must describe all assessments, including tutor evaluations and tutor sign-offs.

Standard 6: Support and development for students and trainees

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

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

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

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

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

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

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

7.4 Tutors should have an identified source of peer support.

Standard 8: Management of initial education and training

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

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

Standard 9: Resources and capacity

9. Resources and capacity are sufficient to deliver outcomes.

9.1 There must be:
   9.1.a robust and transparent mechanisms for securing an appropriate level of resource for delivering an accreditable MPharm degree;
   9.1.b sufficient staff from relevant disciplines to deliver the curriculum to students and trainees. Staff must be appropriately qualified and experienced. The staffing profile must include:
   9.1.b.i sufficient numbers of pharmacists – registrants of the GPhC – with experience of teaching in higher education to ensure that an MPharm
9.1.b.i degree can produce students equipped to enter pharmacist pre-registration training in Great Britain.

9.1.b.ii sufficient numbers of pharmacists to act as tutors and professional mentors at university and in pre-registration. Not all personal tutors must be pharmacists.

9.1.b.iii pharmacists who are leaders in the profession and in their university, who can influence university policy relevant to pharmacy

9.1.b.iv non-pharmacist academics who can influence school and university policy relevant to pharmacy

9.1.b.v staff who are sufficiently experienced to supervise research. It would be unusual for anyone to supervise research at a particular level unless they had researched to that level or beyond. New research supervisors must be mentored and signed off as being fit to supervise after a period of mentoring

9.1.b.vi science academics who understand the relevance of their discipline to pharmacy and deliver their area of expertise in a pharmaceutical context

9.1.b.vii academic pharmacists and other experienced MPharm degree staff who are able to act as mentors to non-pharmacist colleagues

9.1.c pre-registration tutors who meet the GPhC’s standards for pre-registration tutors;

9.1.d career pathways in universities for all staff teaching on MPharm degrees, including pathways for practice staff

9.1.e clear lines of authority and responsibility for the strategic organisation and day-to-day management of placements

9.1.f training and ongoing support for all non-pharmacists involved in the delivery of MPharm degrees which must help them understand:

9.1.f.i help and understand the relevance of their work to pharmacy

9.1.f.ii how to deliver their area of expertise in a pharmaceutical context

9.1.g appropriate learning resources

9.1.h accommodation and learning resources that are fit for purpose

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

Standard 10: Outcomes

10.1 Expectations of a pharmacy professional

<table>
<thead>
<tr>
<th>Learning outcome</th>
<th>MPharm</th>
<th>Pre-reg</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1.a Recognise ethical dilemmas &amp; respond in accordance with relevant codes of conduct and behaviour</td>
<td>Shows how</td>
<td>Does</td>
</tr>
<tr>
<td>10.1.b Recognise the duty to take action if a colleague’s health, performance or conduct is putting patients or public at risk</td>
<td>Knows how</td>
<td>Knows how</td>
</tr>
<tr>
<td>10.1.c Recognise personal health needs, consult and follow the advice of a suitably qualified professional, and protect patients or public from any risk posed by personal health</td>
<td>Does</td>
<td>Does</td>
</tr>
<tr>
<td>10.1.d Apply the principles of clinical governance in practice</td>
<td>Knows how</td>
<td>Does</td>
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<tr>
<td>10.1.e Demonstrate how the science of pharmacy is applied in the design and development of medicines and devices</td>
<td>Shows how</td>
<td>Knows how</td>
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<tr>
<td>10.1.f Contribute to the education and training of other members of the team, including peer review and assessment</td>
<td>Shows how</td>
<td>Does</td>
</tr>
<tr>
<td>10.1.g Contribute to the development of other members of the team through coaching and feedback</td>
<td>Knows how</td>
<td>Shows how</td>
</tr>
<tr>
<td>10.1.h Engage in multidisciplinary team working</td>
<td>Knows how</td>
<td>Does</td>
</tr>
</tbody>
</table>
10.1.i  Respond appropriately to medical emergencies, including provision of first aid  

<table>
<thead>
<tr>
<th>Learning outcome</th>
<th>MPharm</th>
<th>Pre-reg</th>
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</thead>
<tbody>
<tr>
<td>10.2.1.a</td>
<td>Shows how</td>
<td>Does</td>
</tr>
<tr>
<td>10.2.1.b</td>
<td>Shows how</td>
<td>Knows how</td>
</tr>
<tr>
<td>10.2.1.c</td>
<td>Shows how</td>
<td>Does</td>
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<tr>
<td>10.2.1.d</td>
<td>Knows how</td>
<td>Shows how</td>
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<tr>
<td>10.2.1.e</td>
<td>Knows how</td>
<td>Shows how</td>
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<tr>
<td>10.2.1.f</td>
<td>Knows how</td>
<td>Knows how</td>
</tr>
<tr>
<td>10.2.1.g</td>
<td>Knows how</td>
<td>Knows how</td>
</tr>
<tr>
<td>10.2.1.h</td>
<td>Shows how</td>
<td>Does</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>
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</thead>
<tbody>
<tr>
<td>10.2.2.a</td>
<td>Knows how</td>
<td>Shows how</td>
</tr>
<tr>
<td>10.2.2.b</td>
<td>Shows how</td>
<td>Does</td>
</tr>
<tr>
<td>10.2.2.c</td>
<td>Shows how</td>
<td>Does</td>
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<tr>
<td>10.2.2.d</td>
<td>Shows how</td>
<td>Does</td>
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<tr>
<td>10.2.2.e</td>
<td>Shows how</td>
<td>Does</td>
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<tr>
<td>10.2.2.f</td>
<td>Shows how</td>
<td>Does</td>
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<tr>
<td>10.2.2.g</td>
<td>Shows how</td>
<td>Does</td>
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<tr>
<td>10.2.2.h</td>
<td>Shows how</td>
<td>Does</td>
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<tr>
<td>10.2.2.i</td>
<td>Shows how</td>
<td>Does</td>
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<tr>
<td>10.2.2.j</td>
<td>Shows how</td>
<td>Does</td>
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</table>

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

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

10.2.4 Working with patients and the public

<table>
<thead>
<tr>
<th>Learning outcome</th>
<th>MPharm</th>
<th>Pre-reg</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.2.4.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>10.2.4.b Obtain and record relevant patient medical, social and family history</td>
<td>Shows how</td>
<td>Does</td>
</tr>
<tr>
<td>10.2.4.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>10.2.4.d Communicate information about available options in a way which promotes understanding</td>
<td>Shows how</td>
<td>Does</td>
</tr>
<tr>
<td>10.2.4.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>10.2.4.f Conclude consultation to ensure a satisfactory outcome</td>
<td>Shows how</td>
<td>Does</td>
</tr>
<tr>
<td>10.2.4.g Maintain accurate and comprehensive consultation records</td>
<td>Shows</td>
<td>Does</td>
</tr>
<tr>
<td>10.2.4.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>10.2.5.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>10.2.5.b Reflect on personal and professional approaches to practice</td>
<td>Does</td>
<td>Does</td>
</tr>
<tr>
<td>10.2.5.c</td>
<td>Create and implement a personal development plan</td>
<td>Does</td>
</tr>
<tr>
<td>10.2.5.d</td>
<td>Review and reflect on evidence to monitor performance and revise professional development plan</td>
<td>Does</td>
</tr>
<tr>
<td>10.2.5.e</td>
<td>Participate in audit and in implementing recommendations</td>
<td>Knows how</td>
</tr>
<tr>
<td>10.2.5.f</td>
<td>Contribute to identifying learning and development needs of team members</td>
<td>Knows how</td>
</tr>
<tr>
<td>10.2.5.g</td>
<td>Contribute to the development and support of individuals and teams</td>
<td>Knows how</td>
</tr>
<tr>
<td>10.2.5.h</td>
<td>Anticipate and lead change</td>
<td>Knows how</td>
</tr>
</tbody>
</table>

**Appendix 3 – Indicative syllabus**

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

**A1.1 How medicines work**

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

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

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

**Pharmaceutical technology including manufacturing & engineering science**
• Biotechnology
• Manufacturing methods
• Quality assurance processes
• Sterilisation and asepsis
• Environmental control in manufacturing

Formulation and material science
• Materials used in formulations and devices
• Biopharmaceutics, developmental pharmaceutics, pre-formulation and formulation studies
• Design and standardization of medicines
• Microbiological contamination
• Contamination control
• Product stability
• Medical devices

A1.2 How people work

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

Sociology
• Social and behavioural science

Health psychology
• Health promotion
• Disease prevention
• Behavioural medicine

Objective diagnosis
• Differential diagnosis
• Symptom recognition
• Diagnostic tests

Epidemiology
• Aetiology and epidemiology of (major) diseases

A1.3 How systems work

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

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

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

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

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

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

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

**A1.4 Core and transferable skills**

**Professionalism**

**Research and research methods**

**Critical appraisal**
• Audit and learning from errors

**Problem solving**
• Study skills
• Team-working skills

**Clinical decision making**
• Leadership skills

**Accurate record keeping**
Reflective practice (incl. continuing professional development)

Effective communication
- Interpersonal skills
- Medical terminology

Interpret & interrogate clinical data

Analyse & use numerical data

Pharmaceutical numeracy

Technological literacy

**A1.5 Attitudes and values**

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