



Master of Pharmacy
degree (MPharm)

Medway School of Pharmacy
Report of a reaccreditation event
June 2019

Event summary and conclusions	
Provider	Medway School of Pharmacy
Course	Master of Pharmacy degree (MPharm)
Event type	Reaccreditation
Event date	18-20 June 2019
Accreditation period	2018/19 - 2024/25
Outcome	<p>Approval with conditions.</p> <p>The accreditation team agreed to recommend to the Registrar of the General Pharmaceutical Council (GPhC) that the Master of Pharmacy degree provided by the Medway School of Pharmacy should be reaccredited for a further period of six years, with an interim event after three years. This was subject to one condition and the team made two recommendations.</p>
Conditions	<ol style="list-style-type: none"> 1. The School must implement a more meaningful and robust inter-professional education (IPE) strategy, and students must have meaningful engagement with patients, carers, students and other healthcare professionals. This engagement must commence with the 2020 intake onto the MPharm programme, build year on year, and should reflect the School's intention for collaboration with the proposed University of Kent Medical School. The condition was imposed because the team found that the only meaningful IPE with students of other healthcare professions was at stage 3. This is to meet criterion 5.6. <p>The School must submit evidence of how this condition has been met to the GPhC, for approval by the accreditation team; this must be done before the 2020 intake of students onto the programme.</p>
Standing conditions	Please refer to Appendix 1
Recommendations	<ol style="list-style-type: none"> 1. The School is recommended to review the structure and implementation of the Foundation Year in relation to the proposed direct entry onto the MPharm programme; this review should focus on the best practice of other schools with similar foundation year structures in relation to good character and health checks, and fitness to practise requirements.

	2. The School is recommended to review its fitness to practise policy to ensure that it details the provision to enable a student to be temporarily suspended from the programme.
Registrar decision	The Registrar of the GPhC accepted the team's recommendation and approved the reaccreditation of the programme for a further period of six years, subject to meeting the condition described above.
Key contact (provider)	Dr Shivaun Gammie, MPharm Programme Lead
Accreditation team	Professor Ian Marshall (Team Leader), Emeritus Professor of Pharmacology University of Strathclyde Professor Chris Langley (Academic), Professor of Pharmacy Law & Practice and Head of the School of Pharmacy, Aston University; Associate Dean, Taught Programmes, School of Life and Health Sciences Mr Mark Brennan (Academic), Associate Professorial Teaching Fellow and Deputy Head of School at Aston University Pharmacy School Dr Paul Grassby (Academic), Head of School of Pharmacy, University of Lincoln Professor Helen Howe (Pharmacist), Retired Hospital Chief Pharmacist Ms Farwah Bukhari (Pharmacist – recently registered), STEP Pharmacist, Lewisham & Greenwich NHS Trust Professor Dorothy Whittington (Lay member), Emeritus Professor of Health Psychology, University of Ulster and Non-Executive Director, Director, Business Services Organisation for N Ireland Health and Social Care.
GPhC representative	Mr Chris McKendrick, Quality Assurance Officer, GPhC
Rapporteur	Professor Brian Furman, Emeritus Professor of Pharmacology, University of Strathclyde

Introduction

Role of the GPhC

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

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

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

Background

The Medway School of Pharmacy was established as a collaborative venture between the University of Greenwich and the University of Kent in 2004. In 2009, the University of Kent became the Primary Administrative University (PAU) in accordance with the Memorandum of Understanding between the two institutions. This states that the normal expectation is that PAU responsibilities are handed over to the partner institution at the end of the fifth year. Prior to this and from its inception in 2004, the University of Greenwich was the PAU and was again from 2014 to the present. The MPharm programme was reaccredited in 2013 for a full period of six years, with a practice visit to take place after three years; there were no conditions or recommendations. The interim visit took place in May 2016; on that occasion, however, the team imposed three conditions. These were:

- i) The School was required to implement a robust quality assurance process that includes feedback systems for students; this was to meet standard 2.1b. This was because the team had been concerned about an issue relating to the assessment in year 2 that had arisen in the previous year, where student performance had been poor and a retrospective mark adjustment had been made; while understanding the reasons, the team agreed that, to prevent this situation from recurring, the School should review the quality assurance relating to assessment to ensure that it is sufficiently robust and is consistent with safe and effective practice.
- ii) The School was required to implement a meaningful inter-professional education (IPE) and patient engagement strategy; this was to meet criterion 5.6. This was because, while the team heard a lot of 'about' but very little of 'with' and 'from' in the context of inter-professional education, the CAIPE definition of which is "learning with, from and about". Although there were good examples of IPE in the curriculum, this was not consistent and did not increase year on year. Moreover, the level of patient engagement was limited and inconsistent, and there was an over-reliance on the placement provision for this patient exposure.
- iii) In order to meet criterion 9.i.a, the School was required to submit a current and accurate business plan to represent the financial health of the Medway School of Pharmacy; this was required to be accompanied by a risk analysis. The imposition of this condition followed extensive discussions about the financial matters with the senior staff.

The School submitted documentation to meet these conditions by the specified dates. Accordingly, a reaccreditation visit was arranged for 19-20 June 2019, and the following is a report of that event.

Key findings

Standard 1: Patient and public safety

All criteria relating to this standard are met. One criterion (1.1.c) requires minor amendments and one recommendation was made (see recommendation 2). (See Appendix 2 for criteria)

The School has systems in place to ensure that students do not jeopardise the safety of patients and the

public. These include a Fitness to Practise Policy which is introduced to students at the beginning of the course, along with the GPhC's Standards for Pharmacy Professionals; students are updated on these at the beginning of every subsequent academic year. The importance of the Standards for Pharmacy Professionals is emphasised throughout the course, and all members of staff are aware of the requirement for pharmacy students to adhere to them. For registration on the MPharm programme, students must complete an enhanced Disclosure and Barring Service (DBS) check and meet specific requirements for health, including providing evidence of vaccinations. Before going on placements, all students attend a briefing on professionalism that includes health and safety, issues of data protection and patient confidentiality, acceptable dress and appearance, appropriate behaviour, and the limits of their competence. For each placement, students sign a declaration that they will abide by a set of terms and conditions relating to their professional behaviour; it is made clear that any actions or behaviour that fall short of the level expected will be dealt with as a fitness to practise issue. While on placement, students are supervised by appropriate healthcare professionals who are briefed on the levels of competence expected of the students and the tasks that they can appropriately undertake; before embarking on placements, students obtain experience in these tasks in professional skills classes and dispensing laboratories. Students must pass all modules and all competency assessments to progress from one stage of the programme to the next, or to graduate. Those who do not reach the pass mark and/or whose practice during an assessment is deemed to pose a risk to patients or the public will fail; this applies where a student makes what, in real-life practice, would be an unlawful, life-threatening or life-ending decision. Where matters arise that give concern regarding a student's health, attitude or behaviour, this is investigated and, where necessary, the student's case will be considered at University level. If the case is upheld, sanctions may be imposed; students are not allowed to continue on the MPharm programme if they are deemed to pose a risk to the public. However, the School itself does not have the authority to temporarily suspend a student from the programme during investigations of that student's behaviour; this can be done only by the University. Expressing concern that delays in exclusion in these circumstances may jeopardise patient or public safety, the team recommended (see recommendation 1) that the School should review its fitness to practise policy to ensure that it includes the provision to enable a student to be temporarily suspended from the programme.

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

All criteria relating to this standard are met.

The Medway School of Pharmacy is a collaboration between the University of Kent and the University of Greenwich, thus offering students and members of staff the advantages of both institutions, with the School having access to support from the two universities. The School has a ring-fenced budget and operates under a separate set of regulations, but with governance provided by the Primary Administrative University (PAU), which, since the establishment of the School, has changed between the two parent institutions every five years. However, from 2020, the role of PAU will transfer permanently to the University of Kent, which will deal with all matters pertaining to the School, including finances, student records, and student progression. Ongoing management is via the Joint Pharmacy Planning Group (JPPG), which comprises senior members of staff from both universities and from the School, and which is responsible for the School's overall strategy. The School will establish a relationship with the newly established Kent and Medway Medical School, which is a collaboration between the University of Kent and Canterbury Christ Church University, and which will admit its first undergraduate BMBS students in September 2020; the relationship will include links in teaching and research, and will impact on both staff and students. The quality of teaching, learning and assessment is monitored, reviewed and evaluated systematically, with appropriate actions being taken where issues are identified. The evaluation of the quality of teaching, learning and assessment is carried out through a variety of different student surveys, peer review of teaching and evaluation monitoring reports, as per the University of Kent Code of Practice for Quality Assurance, which requires the School to review its modules and programmes annually, as well as to undergo an additional periodic programme review every five years. Formal module review meetings address student achievement for the year, student feedback, external examiner reports, feedback from peer review of teaching and any QA subject benchmark statements or academic

developments in the discipline. The Annual Programme Monitoring Report, prepared by the MPharm Programme Lead, is informed by a number of factors including student performance, module review reports, external examiner reports, and student feedback. This report, which is reviewed by the Education Committee, will then inform the School Annual Report which will be reviewed by the Faculty Education Committee. There is a Staff Student Liaison Committee, which meets formally at scheduled times twice per year, and the membership of which includes student representatives from each stage of the programme. The School ensures that placements for MPharm students are well organised and that the activities carried out during the placements are academically beneficial. There is a placement officer who provides administrative support in organising and co-ordinating the student placements. The content of the placements is determined by academic pharmacists with expertise in hospital or community pharmacy and the module convenors of the relevant modules. Placement providers must ensure the health and safety of the students, and are briefed thoroughly before the placements take place; the information provided includes the learning outcomes of the placement, the School's expectations relating to supervision of the students, and the necessary paperwork to be submitted on completion of the placement. The quality of the placement learning experience is monitored by student feedback on the placement provider. Regarding the overall quality of the programme, the team was pleased to note the recent and marked improvement in the success rate of Medway School of Pharmacy MPharm graduates in the GPhC's Registration Assessment.

Standard 3: Equality, diversity and fairness

Both criteria relating to this standard are met.

Both the University of Greenwich and the University of Kent are committed to the prevention of discrimination and the advancement of equality for both staff and students, and have robust systems in place to support this commitment. The universities track equality and diversity issues through a systematic collection of relevant data. All School policies are subject to equality, diversity and inclusivity considerations. Applicants are considered solely on the basis of their merits, abilities and potential, regardless of gender, ethnic or national origin, age, disability, religion, sexual orientation or any other irrelevant distinction. In designing the modules for the current MPharm programme, the School embedded the expectations of current disability equality legislation, and supports students with a declared disability or special educational needs in its teaching. In pursuit of the equality and diversity policy, teaching, learning and ancillary facilities are organised to ensure practical and reasonable equality of access, through curricula which are accessible, relevant, appropriate and responsive to diverse student needs. Concerns regarding equality and diversity are captured through a variety of means, including the Student Staff Liaison Committee, which feeds into the School Education Committee meetings. All academic staff members are required to undertake training in equality and diversity. This training includes awareness of unconscious bias and of transgender issues; members of staff who are involved in decision-making process concerning admissions are also required to undergo specific training in equality and diversity in relation to recruitment and selection. Equality, diversity and inclusion issues are embedded in the curriculum, with students being introduced to the GPhC's 'Standards for Pharmacy Professionals' in the first year, with a discussion the Equality Act and of protected characteristics being incorporated into stage 2 of the programme; students learn the importance of treating everybody equally and with respect, with equality, diversity and inclusion issues often arising in case scenarios used throughout the course. The School has successfully renewed its bronze Athena Swan award.

Standard 4: Selection of students

All criteria relating to this standard are met. One criterion (4.2.d) requires minor amendments and one recommendation was made (see recommendation 2).

There are two main routes of admission to study pharmacy at Medway School of Pharmacy, these being direct entry via UCAS, and entry via the MPharm with Foundation Year; the new Foundation Year is

intended for those applicants whose academic qualifications are insufficient for direct entry to the MPharm. From 2019/2020, applications received through UCAS will be screened by the University of Kent admissions team (rather than the University of Greenwich team as at present) to determine whether they meet the specified criteria. Applicants meeting these criteria are invited to attend a selection event, which is normally undertaken face-to-face, unless candidates cannot attend in person because they live overseas, or through other mitigating circumstances, in which case they would participate in a virtual selection event, for example, using Skype. During the selection event, candidates complete four activities that are designed to evaluate their ability to become a pharmacy student, and ultimately a pharmacist. These comprise an online assessment covering calculations and including values-based questions, along with three mini-interviews; in these interviews, applicants must demonstrate their awareness of pharmacy and professionalism, complete a fitness to practise declaration, and demonstrate their knowledge of sciences related to pharmacy, as well as show their ability to deal with a simple, pharmacy-related scenario. Those applicants passing the selection event are offered a place. Students who complete the Foundation Year and wish to progress to the MPharm must achieve a minimum of 60% in each module and must also attend a modified selection event, which includes an interview. The science content of the Foundation Year, which will be at a standard between advanced level and university, will include chemistry and biological sciences modules, each covering fundamental science; there will also be a module addressing study skills. Foundation year students undergo fitness to practise, DBS and health checks only on progression to the MPharm, once they have met the academic requirements and passed the selection interview. The team recommended that the School should review the structure and implementation of the Foundation Year in relation to the proposed direct entry onto the MPharm programme; this review should focus on the best practice of other schools with similar foundation year structures in relation to good character and health checks, and fitness to practise requirements.

Standard 5: Curriculum delivery and student experience

Criterion 5.6 is not met and is subject to a condition. All other criteria relating to this standard are met.

The first year comprises four 30-credit modules running simultaneously, while the three 40-credit modules at stages 2 and 3 run sequentially; stage 4 comprises a 60-credit module 'Preparing for Practice' that runs alongside the final year research project and a 20-credit advanced science elective, where students choose one from neuroscience, cellular and molecular biology, drug delivery technology and therapeutic agents. The underlying pharmaceutical sciences of cell biology, biochemistry, physiology, pharmacology, chemistry and pharmaceuticals are addressed across the first year, along with an introduction to pharmacy, which deals with professional skills, law and ethics. Stage 2 deals with 'medicines and diseases' in three modules covering cancer, infections, psychiatry, the skin, lungs and the brain, as well as diseases of the joints, heart, renal and endocrine systems, with the same aspects being revisited at stage 3 in the 'integrated therapeutics' modules; for example, the control of blood pressure introduced at stage 1 will lead into a discussion of hypertension at stage 2, with stage 3 dealing more broadly with cardiovascular disease, and with complex patients and cardiovascular risk being addressed at stage 4. A list of core drugs is used by all members of staff as fundamental building blocks to help students to contextualise their learning. Across the four years, material is taught in an increasingly integrated way, starting with subject-based material taught within separate modules at stage 1. At stages 2 and 3, teaching is organised around body themes, with integration being facilitated by the use of the core drugs, dispensing classes, integrated seminars, sessions involving patients, and inter-professional education. The final year 'Preparing for Practice' module, is described as transdisciplinary; here, students are required to bring together materials taught throughout the programme with the focus on problem solving in the real world of pharmacy practice, with no reference to individual disciplines. The integrated seminars used in stages 2 and 3 typically focus on a patient case with a prescription and cover medicines optimisation, therapeutic issues, pharmacology, formulation, and the chemical basis of therapeutics. Inter-professional education has now been introduced at all four stages, with an increase in students learning with and from other healthcare professionals. This includes a year 2 multidisciplinary case study workshop involving a physiotherapist, a nurse, a practice-based pharmacist, a radiographer, a CQC

inspector, an occupational therapist, and a doctor, as well as a one-day IPE conference taking place during stage 3. In this conference pharmacy students are incorporated into multidisciplinary teams with students from other healthcare professions, including students of nursing, mental health nursing, midwifery, and social work, as well as Foundation Nursing Associates and paramedic science students; here, the students work together in inter-professional teams to resolve problems arising in different scenarios. IPE in the final year involves the pharmacy team, with a focus on pharmacy technicians. There are plans for joint working with the new Kent and Medway Medical School, where the School will seek opportunities for further expansion of the IPE provision; this will be facilitated by the similar numbers of students admitted to pharmacy and to medicine. The placement programme now includes community pharmacy at stage 1, as well as community and hospital pharmacy at stages 2 and 3; in the final year, students make their own choice of where they undertake a two-week placement, which could include a GP practice. Patients are now involved in teaching sessions at all stages of the programme. Students interact with patients in workshops and in the integrated seminars, where they meet patients with a variety of conditions including diabetes, asthma, rheumatoid arthritis, and epilepsy, as well as patients who have had breast cancer or who have suffered a stroke. Videos are used in the integrated seminars where the condition makes it difficult to bring real patients into the University, for example in the case of Parkinson's disease. Formative and summative assessment is undertaken using a variety of approaches including written examinations comprising multiple choice and essay questions, along with competency assessments, such as objective structured clinical examinations (OSCEs) and dispensing tests, which include required elements to demonstrate safe and effective practice, the aim being to determine if the students are minimally competent. Integration is achieved in assessment from stage 2 onwards, with questions based on clinical scenarios and set by at least two members of staff. As part of their assessment, students must also submit a portfolio based on specified information, including continuing professional development records, peer review, and reflections on IPE. Criteria for assessments involving patient care are designed to reflect safe and effective practice, with students failing if their demonstrated practice is deemed as being unsafe.

While additional inter-professional education had been introduced since the interim visit, the team found that the only meaningful IPE with other students was at stage 3. The team therefore imposed a condition that the School be required to implement a more meaningful and robust IPE strategy, and students must have meaningful engagement with patients, carers, students and other healthcare professionals. This engagement must commence with the 2020 intake onto the MPharm programme, build year on year, and should reflect the School's intention for collaboration with the proposed University of Kent Medical School; this is to meet criterion 5.6.

Standard 6: Support and development for students

The single criterion relating to this standard is met.

All new students take part in an induction programme, in which they are introduced to the School and to both universities; this induction provides an insight into academic and support services, including the library, computing, laboratories, student welfare services, financial advice and the careers service. Pastoral support for the students is provided by academic advisers within the School, as well as central support from the Medway Student Centre, University of Greenwich. On arrival each student is allocated an academic adviser who is a registered pharmacist. This individual acts as a student's first-line point of contact for advice, support, guidance and feedback on their personal progress; students meet their advisers individually at least twice per year, and the advisers are always accessible at other times. Students are supported to develop their own unique professional portfolios which are discussed with their academic advisers. For example, students can be encouraged and supported to gain work experience to add to their CVs or could be directed to centralised support. External to the School, the University of Greenwich provides online support to all students. This provides practical academic advice, guidance, as well as help geared to specific stages of university study. Services offered include academic support through the Academic Skills Centre, advice on research skills, advice on presentation and examination techniques, counselling and wellbeing services, support for health and welfare, advice on

financial management, and support for careers through the Careers Service. The pharmacist staff members, who have experience of working in a broad range of pharmacy practice roles, act as professional role models, with the teacher-practitioners in particular bringing real-life pharmacy practice experience from both community and hospital pharmacy perspectives. The front line of academic support is delivered within formal contact time. Attendance at all timetabled workshops, seminars and laboratory classes is monitored and this provides an early warning of individual cases of difficulty, so that appropriate action may be taken. In terms of their personal professional development, the students are encouraged to join the Royal Pharmaceutical Society, the British Pharmaceutical Students Association (BPSA) and the Medway Pharmacy Students Association (MPSA).

Standard 7: Support and development for academic staff

All criteria relating to this standard are met.

Members of the academic staff are employed by the University of Kent, with the exception of the Head of School who is an employee of the University of Greenwich. Members of the teaching support and administrative staff are employed by the University of Greenwich. Teacher-practitioners are employed by their practice employer and seconded to work at Medway School of Pharmacy. All new staff members engage with an induction programme run by the University of Kent or the University of Greenwich; this aims to assist new staff members to understand the culture of the University, gain an awareness of its key policies and practices, and become accustomed to the working environment. The focus of the induction is to ensure that members of staff have an understanding of the duties, activities and expectations relating to their roles. All new staff members are also provided with an induction pack which outlines the work of the School, providing orientation and professional context for non-pharmacists. They are also allocated an appropriate staff member from the existing staff pool who acts as their 'buddy'; this person adopts a mentoring role and will support the staff member along with the probationary supervisor, who is also allocated from the existing staff. The probationary period for new lecturers is usually three years and follows the University of Kent probationary processes for academic staff and the University of Greenwich processes for administrative and technical staff. In addition, non-pharmacists working on the MPharm are introduced to a variety of GPhC policies and standards that govern the initial education and training of pharmacists. These include the education standards as well as the Fitness to Practise Policy and Standards for Pharmacy Professionals; staff development seminars are also held to introduce non-pharmacist staff members to the work of pharmacists in a variety of settings. The University of Kent's Unit for the Enhancement of Learning and Teaching runs the Post Graduate Certificate in Higher Education (PGCHE) programme for new academics. This course, which is a condition of probation for new members of academic staff, is designed to support the development of their knowledge and skills as teachers and researchers, taking different levels of previous experience into account, with academics being able to choose modules relevant to their work and interests. The programme aims to enhance their understanding of the principles of teaching and research in higher education, effectively applying them in their own work. The University of Greenwich also offers an Award of Institutional Credit in Learning and Teaching in Higher Education (ALTHE) which is a 20-credit programme for teacher-practitioners and other part-time members of the teaching staff. All teacher-practitioners attend a one-week induction/planning week in September each year. In addition to the buddying system and formal probationary processes for new staff, they, along with all members of the teaching team, are supported by module conveners, the MPharm Programme Lead and the Director of Education. Line managers are responsible for conducting probationary reviews for new staff members, as well as annual appraisals. Annual appraisals review and share feedback on performance against agreed objectives and plans, and plan future performance by agreeing individual objectives, plans, and priorities that will contribute to the enhancement of School and University performance. One of the outcomes from the appraisal process is an agreement about further professional training and career development plans. The School operates a workload allocation model which is reviewed for all staff members at their annual appraisals and when required throughout the year; the model is being reviewed and revised by the new Head of School. This model aims to ensure an overall balance of workload among the staff. It also aims to achieve the right balance between teaching, administrative duties and research/enterprise

activities for each staff member.

Standard 8: Management of initial education and training

Both criteria relating to this standard are met.

Ongoing management at University level is via the Joint Pharmacy Planning Group (JPPG), which comprises senior members of staff from both universities and from the School, and which is responsible for the School's overall strategy, but with the School having sufficient autonomy to make its own decisions. Because all members of academic staff (except the Head of School) are employed by the University of Kent and because the Primary Administrative University (PAU) function will sit permanently with that institution from September 2020, the majority of the structures and processes relating to education and teaching are derived from those of the University of Kent. However, in some cases the University of Greenwich processes have been adopted and will be transferred with the School as the PAU migrates to Kent; for example, unlike the University of Greenwich, the University of Kent does not currently have a detailed Fitness to Practise Policy. With the permanent PAU transfer, some processes currently undertaken by the School will become centralised; for example, admissions will be fully centralised through the University of Kent from September 2019. The Head of School has overall responsibility for all operations and staff members within the School. Day-to-day management of School is the responsibility of the Senior Management Team, comprising the Head and Deputy Heads of School, together with the Education, Research, Technical and Administrative Leads. There are also several functional committees, including the Education, Research and Enterprise, and Graduate Studies Committees, along with their sub-committees. Each module is managed by a module convener (or joint module convener) whose primary responsibility is to ensure that all learning, teaching and assessment for the module is delivered to a high quality in accordance with all relevant policy and procedures; the convener ensures that an up-to-date Module Study Guide is produced at the start of each academic year and is available to students via the virtual learning environment. The Module Convenor is supported by the Head of School, the MPharm Programme Lead, and the Director of Education, as well as by the School of Pharmacy administrative staff. Students are required to demonstrate a commitment to their programme of study by regular attendance at lectures, laboratory classes, seminars and workshops. Attendance is monitored at all workshop, practical and seminar classes. Attendance data are collected and recorded centrally within the School and University and then shared with members of academic staff, who may use the information during academic adviser meetings with their students. If students attend fewer than 60% of the workshop, practical and seminar sessions within a module they will be deemed not to have met the learning outcomes and will normally be regarded as having failed that module. Failure to meet the required 80% attendance within a module, will normally result in coursework marks being capped at the pass mark. 100% attendance at placements is required to pass the placement elements of modules.

Standard 9: Resources and capacity

All criteria relating to this standard are met.

The School's budget is agreed annually in consultation with the Joint Pharmacy Planning Group (JPPG), which is composed of senior academic and financial managers, from both the University of Kent and the University of Greenwich, and includes the Head of School. The underpinning principle of the budget setting is that the School will generate a reasonable surplus, once running costs have been set against income for each year. Currently, undergraduate student income is derived from the MPharm, the BSc Physiology and Pharmacology and the BSc Physiology and Pharmacology with Foundation Year. However, the BSc Physiology and Pharmacology is to be phased out, along with the introduction, from September 2021, of a new BSc in Neuroscience with a planned annual intake of 30 students. The target intake for

the MPharm is 120 students, along with a new Foundation Year (year 0) for the MPharm, from 2019 onwards, with an initial target of 30 students per year. There are plans to increase overseas recruitment to the MPharm. 81% of the 2017/18 income of £7,154,100 was derived from undergraduate student fees, with 11% coming from postgraduate and professional courses, and 8% from research. The corresponding expenditure of £6,737,343 comprised staff salaries (50%), teaching-related activities, including costs relating to the Primary Administrative University, (38% covering overheads, and contributions to central University costs) and research-related activities (12%). The approach to financial planning was said to be conservative but with ambitious plans for the School set by the University of Kent; these include an increased research income, with personal research plans set for individual staff members, as well as changes dependent on specific courses, particularly the introduction of the Foundation Year for the MPharm and the BSc in Neuroscience. The School comprises three main academic teaching and research groups, these being Biological Sciences, Chemistry and Drug Delivery, and Clinical and Professional Practice. There are 10 (9.4FTE) members of staff in Biological Sciences (two professors, three senior lecturers, four lecturers and one research assistant), eight (7.6.FTE) in Chemistry and Drug Delivery (one professor, two senior lecturers, four lecturers and one research assistant), and eleven (9.5 FTE) in Clinical and Professional Practice (one professor, three senior lecturers and seven lecturers). The School also has five (1.75 FTE) pharmacist teacher-practitioners, as well as two sessional pharmacists and a nurse who contribute to the teaching. The School is in the process of appointing two lecturers in Biological Sciences, one lecturer/senior lecturer in Chemistry and Drug Delivery, and three additional teacher-practitioners are to be appointed in collaboration with Medway NHS Foundation Trust; the possibility of general practice-based teacher practitioners is under discussion with the CCGs. Discussions are also in progress with Medway NHS Foundation Trust concerning a joint appointment who would hold the position of Director of Practice within the School and consultant Pharmacist (epilepsy) within the Trust. The creation of the new Kent and Medway Medical School will offer the opportunity for joint appointments shared equally between medicine and pharmacy. The Learning Resources Centre at Medway is recognised as an excellent resource, and the School has spent significant funds in ensuring that it is stocked with appropriate texts and online resources. The School occupies all 3000 m² of the Anson building, of which 2225 m² are allocated to teaching and research facilities; there is ongoing commitment to update and improve these facilities. There are maintenance and replacement spends within the budget to support the successful delivery of the MPharm programme in the future.

Standard 10: Outcomes

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

The team's scrutiny of the learning outcomes included in-depth discussion of five selected outcomes with the teaching staff; those selected were 10.1.d, 10.2.1.e, 10.2.2.h, 10.2.3.e, and 10.2.5.a. Having discussed these outcomes, and scrutinised the documentation relating to these and to the other 53 outcomes, the team was satisfied that all 58 outcomes are met at the appropriate levels.

Indicative syllabus

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

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

Appendix 1 - Standing conditions

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

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

Appendix 2 – Standards

GPhC standards for the initial education and training of pharmacists

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

Standard 1: Patient and public safety

1. **There must be clear procedures to address concerns about patient safety arising from pharmacy education and training. Concerns must be addressed immediately.**
 - 1.1 There must be effective systems in place to ensure that students:
 - 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 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;
 - 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.

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

4. Selection processes must be open, fair and comply with relevant legislation. Processes must ensure students 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 must deliver the outcomes in Standard 10. Most importantly, curricula must ensure students 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.
- 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.

Standard 6: Support and development for students

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 to develop as learners and professionals.

Standard 7: Support and development for academic staff

- 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.

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. 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. 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

Standard 10: Outcomes

10.1 Expectations of a pharmacy professional

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

10.2 The skills required in practice

10.2.1 Implementing health policy

Learning outcome	MPharm
10.2.1.a Promote healthy lifestyles by facilitating access to and understanding of health promotion information	Shows how
10.2.1.b Access & critically evaluate evidence to support safe, rational & cost effective use of medicines	Shows how
10.2.1.c Use the evidence base to review current practice	Shows how
10.2.1.d Apply knowledge of current pharmacy-related policy to improve health outcomes	Knows how
10.2.1.e Collaborate with patients, the public and other healthcare professionals to improve patient outcomes	Knows how

10.2.1.f	Play an active role with public and professional groups to promote improved health outcomes	Knows how
10.2.1.g	Contribute to research & development activities to improve health outcomes	Knows how
10.2.1.h	Provide evidence- based medicines information	Shows how

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

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

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

Learning outcome	MPharm	
10.2.3.a	Ensure quality of ingredients to produce medicines and products	Knows how
10.2.3.b	Apply pharmaceutical principles to the formulation, preparation and packaging of products	Shows how
10.2.3.c	Verify safety and accuracy utilising pharmaceutical calculations	Does
10.2.3.d	Develop quality management systems including maintaining appropriate records	Shows how
10.2.3.e	Manage and maintain quality management systems including maintaining appropriate records	Shows how
10.2.3.f	Procure and store medicines and other pharmaceutical products working within a quality assurance framework	Knows how
10.2.3.g	Distribute medicines safely, legally and effectively	Knows how
10.2.3.h	Dispose of medicines safely, legally and effectively	Knows how
10.2.3.i	Manage resources in order to ensure work flow and minimise risk in the workplace	Knows how
10.2.3.j	Take personal responsibility for health and safety	Does
10.2.3.k	Work effectively within teams to ensure safe and effective systems	Knows how

are being followed	
10.2.3.l Ensure the application of appropriate infection control measures	Shows how
10.2.3.m Supervise others involved in service delivery	Knows how
10.2.3.n Identify, report and prevent errors and unsafe practice	Shows how
10.2.3.o Procure, store and dispense and supply veterinary medicines safely and legally	Knows how

10.2.4 Working with patients and the public

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

10.2.5 Maintaining and improving professional performance

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

Appendix 3 – Indicative syllabus

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

A1.1 How medicines work

Therapeutics

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

Applied Physical, Chemical and Biological sciences

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

Pharmacology, pharmacokinetics & pharmacodynamics

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

Pharmaceutical technology including manufacturing & engineering science

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

Formulation and material science

- Materials used in formulations and devices
- Biopharmaceutics, developmental pharmaceuticals, 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)*

