



Summary Report of the On-Site
Compliance Visit to the Five-Year
Integrated Master's Degree Programme
in Pharmacy Provided by Trinity College
Dublin

Approved by PSI Council 15 September 2016

**Summary Report of the On-Site Compliance Visit to the
Five-Year Integrated Master's Degree Programme in
Pharmacy provided by Trinity College Dublin**

In accordance with Article 7(2) of the Pharmacy Act 2007

and

Part 3, Rule 8 of the Pharmaceutical Society of Ireland (Education and Training)
(Integrated Course) Rules 2014 [S.I. No. 377 of 2014]

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i. Introduction

Stemming from the Pharmacy Act 2007 (as amended) and recognised in Directive 2005/36/EC of the European Parliament of the Council on the Recognition of Professional Qualifications, the Pharmaceutical Society of Ireland (PSI, the pharmacy regulator) has responsibility and powers for the approval of the programmes of education and training of pharmacists in Ireland.

The present accreditation concerns the accreditation of the 5-year fully integrated Master in Pharmacy degree delivered by the School of Pharmacy and Pharmaceutical Sciences, Trinity College Dublin (TCD) against the PSI's Accreditation Standards for the fully integrated Masters Degree programmes in Pharmacy approved by the Council of the PSI on 2 October 2014. Successful completion of the programme leads to the award of the MPharm degree and the Higher Education Institute confirming that a graduate fully demonstrates the competencies necessary to enter the register of Pharmacists held by the PSI.

A paper-based review was carried out in June 2015 and the PSI Council, at its 17 September 2015 meeting, approved the recommendations of the accreditation team that the Five-Year Fully Integrated Master's Degree Programme in Pharmacy provided by Trinity College Dublin be recognised and approved for an initial period of two (2) years with a review on-site visit at or towards the end of the first year of delivery.

This is the report of the on-site compliance visit to TCD in February 2016.

ii. Process of review

The visit

The on-site compliance visit took place in TCD on 2nd and 3rd February 2016. The accreditation team held a preparatory meeting in PSI House on 1st February, in advance of the on-site visit.

The accreditation team

The PSI accreditation team comprised:

	Designation at the time of visit
Professor Brenda Costall	Team Leader (Chair). Former Pro Vice-Chancellor for Planning and Resources, Deputy Vice-Chancellor, and Head of School of Pharmacy, University of Bradford, UK. (Panel Category: Pharmacy academic with experience of developing and/or accrediting pharmacy degree programmes (International academic)).
Dr. Norma Ryan	Former Director of the Quality Promotion Unit, University College Cork. (Panel Category: Accreditation expert/HEI Quality Assurance/Regulatory expert).
Mr. Fionán Ó'Cuinneagáin	Former CEO of the Irish College of General Practitioners (ICGP), former member of the Council of the PSI and Chair of the PSI Professional Development and Learning Committee. (Panel Category: Non-pharmacist Patient Advocate/Public Interest/Risk expert).
Dr. Aislinn Joy	Lecturer in Medical Education (MUH), Medical Education Unit, School of Medicine, University College Cork. (Panel Category: Healthcare non-pharmacist member).
Professor Jane Portlock	Professor of Pharmacy Practice, University of Portsmouth. (Panel Category: Pharmacy academic with experience of developing and/or accrediting pharmacy degree programmes (International academic)).
Ms. Norma Harnedy	National Liaison Pharmacist for Drug Addiction (HSE). (Panel Category: Pharmacist practising in Ireland).

Ms. Meghan Kearney	Community pharmacist. (Panel Category: Recently qualified pharmacist with 0-3 years' post-registration experience (representative of student experience)).
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Along with;

Dr. Lorraine Horgan	Head of Professional Development & Learning, PSI
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Ms. Cora O'Connell	Education Manager, PSI
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Dr. Matthew Maltby	Education Standards Officer, PSI
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Dr. Ian Marshall	Rapporteur
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There were no declarations of interest

The standards

The standards for the 5-year integrated Master's degree are arranged under the following headings:

Standard 1 – The Professional Degree Programme Provider and Mission

Standard 2 – Leadership, Organisation and Governance

Standard 3 – Resources

Standard 4 – Curriculum

Standard 5 – Teaching and Learning Strategy

Standard 6 – Assessment Strategy

Standard 7 – Quality Assurance and Enhancement

Standard 8 – Students

The programme

The programme comprises three years of learning at Trinity College Dublin (TCD), incorporating short workplace-based experiential learning components followed by block experiential modules commencing at the start of the fourth year of the programme and in the second half of the final year of the programme running in series with additional learning at TCD. New taught modules contributing 30 ECTS will be delivered alongside a major (4-month) placement component at the start of the fourth year of the programme and a further 30 ECTS of new course material will be aligned to an 8-month placement component in the fifth year of the programme, both under the aegis of the Affiliation for Pharmacy Practice Experiential Learning (APPEL), an organisation jointly funded and governed by the three Irish schools of pharmacy. Additionally, a project bearing 30 ECTS will be undertaken by students in the fifth year of the programme while on placement.

iii. Meeting the standards

Standard 1 – The Professional Degree Programme Provider and Mission

The mission of the School is to deliver continuous learning in the science and practice of pharmacy, supported by innovative teaching and a culture which is aligned with best practice. The mission is supported by a draft School Strategy, Teaching and Learning, and Assessment Strategies, and Fitness to Practise Policy and Procedures. The School Strategy, together with some other key documents, is still in draft form. The Strategy was signed off by the School Executive in November 2015. The School, at the request of the Dean, is currently undertaking a benchmarking exercise against European schools of pharmacy, particularly in the UK. The Strategic Plan will be reviewed on an annual basis. The team agreed that it will be a **requirement** that the School submit its updated and approved Strategic Plan including updated KPIs (see below) to the PSI by 30 April 2016. Overall, the team agreed that the strategic plan was appropriate but, given the increasing accent in modern pharmacy education on pharmacists developing clinical skills, the team will look forward to learning further of the implementation of the plans to increase staffing and leadership in the area of pharmacy practice as the programme develops. The team was told that although the School was anxious to effect the long-planned appointment of a chair in clinical pharmacy, the Faculty and College were unwilling to move to appointing to this post before a full scoping exercise had been carried out to assess the likelihood of being to make a suitable appointment with an appropriate research track record. The pharmacy practice staffing plans also contain an appointment of an assistant professor in the subject area from 2017 onwards, a 0.8FTE teacher-practitioner who has been in post since November 2015, and two new practice educator appointments, one of whom is already in post. It will be a **requirement** that the College inform the PSI of the progress of the above scoping exercise by 30 April 2016 with a final indication of the outcome by 30 September 2016.

Students of the School are expected, both while on placement and in the classroom and laboratories, to demonstrate a high standard of professional behaviour, congruent with the College's mission. While on placement, students are required to comply with the Code of Conduct for Pharmacy Students of the School, with the disciplinary rules of the placement provider, and with the regulations of the College relating to student conduct. The team was pleased to note that outcomes also included ensuring that practice involves rational, optimal, effective and safe use of medicines. Thus, when on placement, students are reminded that patients' and clients' interests and safety take precedence over students' education. The team was also pleased to note that the learning outcomes specifically mention patient-centred practice, professionalism and continuous professional development/lifelong learning, all reflected in the educational philosophy described which address competencies within the CCF for pharmacists.

The School has a Fitness to Practise (FtP) Policy and Procedure document which is accessible for all students and staff members. FtP issues will be reviewed by the relevant Director of Teaching and Learning and the Junior Dean and students will also be removed from the classroom or placement/the public domain pending the hearing outcome in serious cases in order to protect the public. Once a year, the Head of School will confirm to the PSI that students who have successfully completed the programme have satisfied the criteria outlined in Rule 20, Part 5 of the Pharmaceutical Society of Ireland (Education and Training) (Integrated course) Rules 2014 (S.I. No. 377 of 2014) (Appendix 4.8).

The School has a number of goals and associated key performance indicators (KPIs) for the programme which are designed to ensure compliance with the Accreditation Standards of the Pharmaceutical Society of Ireland, with University Standards for the award of a level 9 qualification in line with Quality and Qualifications Ireland (QQI), and with international norms for qualification in the field. At the time of the paper-based review, most of the KPIs were expressed in the future tense, as they related to a programme which had not yet commenced at the time of documentation preparation. The team was told that KPIs are considered by the School to be finalised, subject only to approval by the Vice-Provost at the forthcoming Annual Budgetary Cycle meeting. Some new KPIs were presented for the on-site visit, including a description, rationale, baseline, target, strategy, data collection frequency and timeframe for implementation of each KPI, which the team regarded as an improvement although still questioned if they stretched the capabilities of the school sufficiently. The Head of School told the team that the School had tried to be realistic in devising the KPIs, although some, like maintaining or improving the student:staff ratio would be difficult to achieve. The team agreed to re-visit the KPIs at the next on-site visit.

As part of the APPEL, there will be practice educator pharmacists (2 x 0.5 FTE) assigned solely to TCD. At the time of the paper-based review, the team agreed that the establishment, development and implementation of the APPEL initiative was a vital part of the plans for the 5-year integrated degree in all three Schools. The School confirmed that a consortium agreement establishing the legal basis for APPEL was signed by the three HEIs (UCC, RCSI and TCD) on September 21 2015, the National Co-ordinator took up her position during the period of the on-site visit, one practice educator has already been appointed and is in post, with a second to be appointed for June 2016, and with a project manager already in post.

Conclusion: The accreditation team was confident that this Standard can be met subject to the **requirement** that the School submit its updated and approved Strategic Plan including updated KPIs (see also Standard 7 below) to the PSI by 30 April 2016. This is because, although the Strategy was signed off by the School Executive in November 2015 a benchmarking exercise against European schools of pharmacy, particularly in the UK, is being undertaken at the request of the Dean. The timelines for approval of School Strategic

Plans have changed and College will not now be finalising School Strategies until early 2016, when there will be a process of review and sign-off by the Vice-Provost.

Additionally, it will be a **requirement** that the College inform the PSI of the progress of the scoping exercise related to the long-planned appointment of a chair in clinical pharmacy by 30 April 2016 with a final indication of the outcome by 30 September 2016. This is because the Faculty and College were unwilling to move to appointing to this post before a full scoping exercise had been carried out to assess the likelihood of being to make a suitable appointment with an appropriate research track record.

Standard 2 – Leadership, Organisation and Governance

The School is led by the Head of School who is supported by the School Executive Committee. The School Committee includes more extensive staff membership as well as student representatives, while the Programme Management Committee (PMC) includes some members of the School Executive and other representatives of the School's staff and students. The Head of School takes ultimate responsibility for the Professional Degree Programme and associated resources, is the budget holder, following devolved authority, and is financially accountable to the Faculty Dean. The Head of School is committed to reporting to the PSI any changes in resources that are pertinent to the delivery of the Professional Degree Programme. A financial budget has been developed which factors in the additional costs that are pertinent to the delivery of the new programme. The Head of School is also aware of the obligation to report to the PSI at the point of graduation confirmation that each graduate has met the competencies in the CCF. The team noted that Rule 20 of the PSI (Education and Training) (Integrated Course) Rules 2014 requires the Head of School to confirm his or her overall satisfaction that the person concerned is fit to be a registered pharmacist. The team agreed that the documentation provided a comprehensive description of the management and governance structures within the School, with very clear responsibilities described and appropriate student representation with students being nominated by their peers.

The School has systems in place to ensure that students do not jeopardise patient safety and only undertake tasks under appropriate supervision; are monitored and assessed to assure they always work and perform safely; understand what fitness to practise mechanisms apply to them; and are not awarded an accredited degree or placed into any part of the programme that involves access to patients, the public or confidential data, if they are considered likely to pose a risk. These include designing the activities undertaken to ensure that they are suited to the knowledge/skills of the students at each stage of the programme, and assessment to ensure that students have demonstrated satisfactory knowledge/skills to progress to subsequent patient-facing activities.

The programme consists of two parts, a four-year undergraduate component leading to the award of a BSc (Pharm) degree, followed by a postgraduate fifth year leading to the award of the MPharm degree. At the time of the paper-based review, the team was concerned that the ability of a student who had not completed the whole programme to graduate with a Bachelor of Pharmacy degree could cause confusion and misunderstanding with potential for patient safety issues. The accreditation team noted that the accreditation standards for pharmacy degree programmes pertained only to a five year, and not a four year, course of studies. The team agreed that it would be a requirement that students should be advised by the provider of this matter on entry to the course. In response, the School confirmed that this information was included in the 2016/17 prospectus entry and on the School website to

inform students of this matter in advance of applying to the programme, and further confirmed that students will be advised of this matter on entry to the new course.

The team noted at the paper-based review the strong emphasis on interprofessional working from the start via workshops with the seven other disciplines within the Health Science Faculty, aiming to demonstrate how effective team working and communication can benefit patient care. The team agreed at the time of the paper-based review that the commitment to interprofessional learning was a strength of the proposed provision, although this was not the subject of significant discussion at the on-site visit, and students interviewed, albeit at a very early stage of their studies, had not experienced such learning opportunities.

Conclusion: The accreditation team was confident that this Standard will be met

Standard 3 – Resources

The teaching of each module will primarily be carried out by academics within the School, supported by external lecturers. The programme will also use lecturers from within the College, whose specialist knowledge or expertise complements that of the Pharmacy staff. Module co-ordinators and academic staff responsible for discrete module elements liaise with and support external contributors in all aspects of their teaching and contact with students. At the time of the paper-based review, the team agreed that the staffing was appropriate in terms of quality but had some concerns in relation to the balancing of the staffing profile for the organisation and delivery of a modern, integrated, clinically-focussed pharmacy degree. At the site visit, the team was told that the staff complement associated with the teaching of practice elements of the course would be 6.8 FTE, with 17 FTE staff members associated with the scientific aspects of the course. As discussed in the commentary to Standard 1 the team learned that the Faculty and College planned to undertake a full scoping exercise to assess the likelihood of being to make a suitable appointment with an appropriate research track record to the position of Chair in Pharmacy Practice. The pharmacy practice staffing plans also include an appointment of an assistant professor in the subject area from 2017 onwards, a 0.8FTE teacher-practitioner who has been in post since November 2015, and two new practice educator appointments, one of whom is already in post, and the second will be recruited in 2016. The overall staffing plans also contain the replacement of a professor in pharmaceutical chemistry and a chair in pharmacology at the equivalent levels, along with the creation of an Ussher assistant professor post in the pharmaceutical chemistry of nanocarrier drug delivery systems. The team noted that the student:staff ratio for the School (23:1) is higher than that for the Faculty as a whole (20:1) and, despite the difficulties in reducing the ratio described by the Head of School (see Standard 1 above), would like to see moves towards achieving this objective at the next on-site visit.

The tutor pharmacist/preceptor pharmacist list will be managed by APPEL in a collaborative manner involving the three Schools of Pharmacy in Ireland. At the time of the paper-based review, the team agreed that the establishment of APPEL was a positive and innovative approach and was aware that its proper functioning is vital to the success of the integrated 5-year programme. Thus, the team being cognisant of the fact that APPEL was still in the development phase nevertheless agreed that there would be a requirement for future on-site visits for details of the measures proposed to ensure that APPEL recruits and trains tutors that meet its specification, and how APPEL plans to increase numbers of practice placement opportunities to service the needs of the three schools of pharmacy. At the on-site visit the team agreed that the **requirement** remain extant with an update on progress to be provided by 30 September 2016.

There has been front-loading of financial support that will need to be reconciled by 2019-20. The financial challenges facing the School relate to the introduction of a student fee for the

5th Year of the programme, and the funding environment for public sector third level HEIs. The School's contingency plans are aligned to the College Risk Management Policy which applies across the College to all activities and all areas including major infrastructural and research projects. At the time of the paper-based review, the team agreed that it be a requirement that contingency plans be made available to assure the continued running of the programme, at least for students enrolled in the programme, in case of any financial difficulty. In response, the School stated that a Risk Management Policy pilot was recently undertaken in the Faculty, the outcomes of which will be known at the beginning of 2016. The School of Pharmacy and Pharmaceutical Sciences has indicated that it wished to be in the first round of implementing the Risk Management Project.

The team was able to observe some of the teaching facilities, including the pharmacy practice suite, with model pharmacy and consulting room with AV facilities, two pharmaceutical chemistry laboratories, a pharmaceuticals laboratory equipped with software for labelling of extemporaneous preparations, an aseptic suite, and e-learning suite with recording facilities. The team also benefitted from a demonstration of the purpose-designed e-portfolio system and a 3-dimensional system for dispensing simulations. The team also heard about the use of the Pharmapod patient safety system, the student polling system, and CCFLive. The team was told at the on-site visit that there were no additional anticipated building needs but that small teaching rooms were always an issue. On this matter, two new small group teaching rooms have been made available and there is increased quality of the teaching spaces in the Panoz Institute as a result of some research activities being translocated to the Trinity Biomedical Sciences Institute.

Conclusion: The accreditation team was confident that this Standard can be met subject to the **requirement** for an update to be provided by 30 September 2016 on progress on the measures proposed to ensure that APPEL recruits and trains tutors that meet its specification, and how APPEL plans to increase numbers of practice placement opportunities to service the needs of the three schools of pharmacy. This is because the team was cognisant of the fact that APPEL was still in the development phase.

Standard 4 – Curriculum

At the time of the paper-based review, the team acknowledged that there was a strong emphasis on professionalism and ensuring that students met the CCF and the Code of Conduct requirements. The team had some difficulty in discerning a logical sequencing of the modules, including the progression and inter-relationships of the taught units, how integration of science and practice/clinical pharmacy would be achieved, and how the programme would make students ready for the future pharmacist roles which are likely to be emerging in the next ten years. Nor was it clear as to how the progression within the programme would ready students for an experiential placement occurring at the start of Year 4. At the on-site visit both the Dean and the Head of School explained that the College and the School believed that it was crucial to provide students with a strong scientific base upon which they could build and subsequently draw together material from several stands and synthesise a complete picture for themselves, rather than presenting the material in an already synthesised form.

However, subsequently, the team heard a specific presentation on integration which, acknowledging that a criticism of integrated curricula is a loss of depth of disciplinary knowledge, stated that the School's approach was to achieve a balance between an adequate depth of disciplinary learning required to understand and develop concepts of pharmacy science and practice, and cross-disciplinary integration and integrative teaching to relate learning content to practice experience and settings. The presentation further analysed the modules of the course from the standpoint of Harden's integration ladder construct, a modern classification of the level of integration of a programme. It is the aim of the School to have a minimum of level 3 of Harden's ladder in all modules, i.e. harmonisation, where students can link the material from different modules taught contemporaneously. Many modules are at level 6, i.e. sharing, where two disciplines jointly implement a teaching programme. However, there are also modules throughout the programme at levels 9, 10, and 11 of Harden's ladder classification, i.e. multi-, inter- and trans-disciplinary in which either a number of disciplines are brought together with themes or topics as a focus for student learning (multi-), there are commonalities of learning with no reference to specific disciplines (inter-), and where knowledge and disciplines are exemplified in real-world settings and integration is done naturally in the mind of the student (trans-). The team welcomed the fact that this type of analysis was being undertaken and will look forward to hearing of the progress towards a more integrated approach at subsequent on-site visits. Orientation sessions and schematics will be developed to help signpost students through the programme and to illustrate links. The team will look forward to hearing of the progress towards a more integrated approach at subsequent on-site visits. See also commentaries on Standards 5 and 6 below, as the team was told that the approach to integration will be included in both the Teaching and Learning, and Assessment Strategies.

To test the level of integration planned by the teaching staff, three themes were chosen to explore with staff the vertical progression of knowledge and the horizontal integration between science and practice. Staff members talked freely about the development of these themes and demonstrated a good knowledge of parts of the programme for which they were not themselves responsible. The team agreed that the enthusiasm and dedication of the staff represented a sound starting point for the future development of a more integrated approach to the MPharm programme. Year 1 students interviewed told the team that they had learned more than they had expected in their short time on the course, they described a broad mix of practice and science, being pleasantly surprised to have a foundation base of science albeit well-linked in to practice with relevance pointed out.

The team noted that an ethical and professional approach is introduced in Year 1 in the pharmacy practice modules and throughout the programme to Year 5, including a gradual progression from direct teaching e.g. of communication skills, through to a demonstration of ethical and professional behaviour in the OSCEs in Year 5. There is intended to be a strong emphasis on ethical and professional practice in the practice placement assessed by the tutor pharmacist to assure Competence Assessment and Performance Appraisal (CAPA) Level 4 is achieved. Pharmacy practice teaching has been incorporated into case studies in the pharmacology modules in Years 1-3 and that much of the success of the clinical teaching will rest on these pharmacology and clinical therapeutics modules. At the time of the paper-based review, the team agreed that research-led teaching is strong in the School but considered that the curriculum would benefit from greater consideration of policy development and developments in pharmacy services. The School's response highlighted that in a Year 4 module, specifically in terms of development in pharmacy policy and developments in pharmacy services, the syllabus incorporates learning content in the areas such as evidence-based practice, patient-centred care, clinical guidelines, reflective practice and the responsible use of medicines. The team considered that the proposed Chair in Pharmacy Practice would have an impact on the development of such teaching and learning, and on the associated research. The team agreed that the **requirement** set at the paper-based review that the School provide evidence of how it is making increased efforts to embrace evolving concepts of pharmacy and of pharmacists' emerging roles in the delivery of healthcare remain in place, and will look forward to learning of the progress at the next on-site visit, after receiving an update on progress by 30 September 2016, along with a full updated curriculum by 31 December 2017.

The current academic staff complement in the School includes pharmacists who practise in both patient-facing (teacher-practitioners) and non-patient facing (academic and research pharmacists) roles. Additionally, academic staff members include basic and clinical pharmacologists, chemists, biochemists and medical doctors. The interdisciplinary team approach within the School provides a foundation which is built upon by the interprofessional learning component, jointly run by several Schools within the Faculty of Health Sciences, including medicine, nursing, physiotherapy, occupational therapy, nutrition

and dietetics. As at the paper-based review, the team recognised the potential strengths in the interdisciplinary team described, and of the interprofessional learning element of the programme, and look forward to seeing how these educational developments link in to the new programme as it is rolled out over five years.

Oversight, management and quality assurance of the three principal professional placements will be via APPEL. Additionally, there are other short practice-based experiences throughout the course which serve as experiential learning, reinforcing and informing students' knowledge and encouraging reflection on their competency-based learning needs through CCF Live. A two-week placement is undertaken in Semester 2, Year 2, with the first substantial experiential learning placement undertaken at the beginning of Year 4. Finally, students undertake the second major experiential learning placement during the last eight months of Year 5. This eight-month placement must be undertaken in a patient-facing environment under the supervision of a preceptor pharmacist. As this eight-month placement cannot be undertaken in the same establishment as the shorter placement in Year 4, experience of different practice settings is facilitated. The team agreed, as at the paper-based review, that the establishment of APPEL, along with the appointment of the practice educators, is an innovative and forward-looking enterprise, and one whose success is crucial to the development and implementation of the integrated programme. The team was aware that the process for the quality assurance of placements was not yet finalised and agreed that the **requirement** set at the paper-based review remain extant, i.e. that an explanation be provided as to how the pre-placement activity/learning will prepare students for placements, how readiness for placements will be assessed, and how students deemed unready for placement will be managed. An update on this requirement must be submitted to the PSI by 30 September 2016.

The team agreed that there was a detailed and comprehensive mapping of the School's curriculum to the requirements of legislation, detailing the relevant minimum national and European legal requirements, and the recommendations for the Advisory Committee on Pharmaceutical Training (1995) as relevant to the curriculum.

Conclusion: The accreditation team was confident that this Standard is likely to be met subject to the **requirement** that the School provide an updated curriculum by 31 December 2017 with details of how it is making increased efforts to embrace evolving concepts of pharmacy and of pharmacists' emerging roles in the delivery of healthcare. This is because although the team agreed that research-led teaching is strong in the School it considered that the curriculum would benefit from greater consideration of policy development and developments in pharmacy services.

Additionally, it will be a **requirement** that an update be submitted to the PSI by 30 September 2016 as to how the pre-placement activity/learning will prepare students for placements, how readiness for placements will be assessed, and how students deemed

unready for placement will be managed. This is because the team was aware that the process for the quality assurance of placements was not yet finalised.

Standard 5 – Teaching and Learning Strategy

The programme in TCD falls into three periods; the Freshman years (Years 1 and 2) and the Sophister years (Years 3 and 4), followed by the fifth and final year of the programme. The complexity of the material also increases over the course of the programme, progressing from Junior Freshman basic sciences through to integrated patient care activities in the Sophister years, and experiential patient-facing periods during the final year. The programme emphasises the application of theoretical knowledge in practice, and includes extensive case-based learning and practical components. Significant workplace-based experiential learning has been distributed throughout the programme, along with sessions for debriefing and discussion. From the outset of the programme, students are encouraged to determine and take responsibility for their own learning needs. Thus, throughout all four years, students maintain a reflective e-portfolio in which they record personal learning cycles in order to develop their capacity to identify learning needs through self-appraisal, planning appropriate action, undertaking self-directed learning and evaluating its impact, with reflection and documentation throughout. In addition, the programme incorporates an increasing proportion of self-directed learning activities as the students progress from the Freshman years to Sophister level.

The team agreed that, despite the comments under Standard 4 and the various associated requirements in advance of the on-site visit, the School had made substantial efforts to produce an integrated and progressive course. It is expected that the range of preferred learning formats of the intended student body will vary, and hence the teaching and learning strategy seeks to accommodate such predicted variations. Throughout the programme, emphasis is placed on the contribution of the pharmacist within the healthcare team, including the clinical skills that enable the critical review of patient pharmacotherapies. The team noted the variety of experiences outlined which highlight the application of the pharmacists' skills as part of the healthcare team. The contribution of the pharmacist in the regulatory setting and the industry setting are also adequately described. External practising pharmacists are invited to offer insight of their contribution to the multi-disciplinary team in the workplace.

Students gain first-hand structured experience of practice throughout the programme, including contact with patients. There is a structured progression from simple tasks undertaken in isolation, to multi-faceted problem-solving in complex cases, with a structured, guided practical experience of working with patient, carers and healthcare professionals throughout and guided by CCF-LIVE and demonstrated in Years 4 and 5 to CAPA level 3 and 4 respectively. The programme is designed to facilitate experiential learning throughout, commencing at an early stage. Experiential workplace-based learning will be facilitated in the principal professional placements managed by the APPEL in Years 2, 4 and 5, and students will be supported to gain further workplace-based patient-facing experience during Years 1-3 in the form of additional experiential learning linked to *CCF Live*,

in order to ensure that even if students' early placements are in non-patient facing environments all students will nonetheless have gained patient-facing practice experience each year. Knowledge and skills gained in experiential learning components are incorporated into subsequent campus-based clinical skills, dispensing and patient care, and medicines provision and patient care activities. Again, the team was aware that the timely implementation and early effective functioning of APPEL will be crucial to the success of this aspect of the provision and that the accord between the experiential and academic learning will require some skilful interactions.

Pharmacy law, ethics, professionalism and pharmacy practice are taught almost entirely by registered pharmacists with the School having a number of full-time and part-time practising MPSI academic staff and teacher-practitioners. Professionalism is an ethos that permeates all teaching and learning, representing a strength of the teaching team. The team agreed that the School's commitment to the promulgation of professionalism represented a strength of the planned provision.

Conclusion: The accreditation team was confident that this Standard is likely to be met subject to the **requirement** that the School resubmit an updated version of its Teaching and Learning Strategy to the PSI by 30 September 2016. This is because the team had heard (see commentary to Standard 4 above) that the School was in the process of continuing to develop its approach to integration of the programme.

Standard 6 – Assessment Strategy

The Programme Management Committee (PMC) exercises control over the content, delivery methods and modes of assessment of each of the modules in the programme. A range of assessment methods, including diagnostic, formative and summative assessments, undertaken individually or in groups, in the form of multiple choice questions, essay-style examination answers, laboratory exercises and reports, literature searches, observation of teamwork and problem-solving, role play, case studies, OSCEs, class quizzes, oral presentations, dissertations, research tasks and project reports, reflective journals, wikis, peer evaluation and novel strategies such as crosswords, online simulations and class development of teaching/learning material, is employed at each level of the programme for the determination of development and acquisition of the CCFs. The attainment of core competencies in Years 4–5 will be formally assessed by pharmacist preceptors in the practice settings. Essential skills such as pharmaceutical calculations, problem-solving and critical-thinking are assessed throughout the course. OSCEs will take place in each year of the programme and are designed to ensure that all of the skills are assessed in the one scenario. Knowledge of pharmacy law is evaluated throughout the programme using a variety of formative and summative assessment modalities, including written examinations, practical coursework and tests, CAPAs, group activities, OSCEs, reflective e-portfolio activities and case-based MCQs. A terminal formal examination of pharmacy law will be incorporated in the PRE. The PRE will incorporate a multi-station OSCE, jointly developed and examined by the Schools of Pharmacy in TCD, UCC and RCSI.

Processes are in place, and procedures and practices evolved, to ensure the integrity of the assessment process. The initial responsibility for ensuring reliability of assessment scores lies with the module co-ordinator. All written examination components are assessed by anonymous marking. Module marks are collated into year marks for review at the Court of Examiners. Meetings will be held to review assessment scores for Years 1-3, then separately to review the Year 4 and MPharm marks and grades. The process is subject to external review on an annual basis.

Conclusion: The accreditation team was confident that this Standard is likely to be met subject to the **requirement** that the School resubmit an updated version of its Assessment Strategy to the PSI by 30 September 2016. This is because the team had heard (see commentary to Standard 4 above) that the School was in the process of continuing to develop its approach to integration of the programme, the outcome of which is likely to impact the assessment strategy. The team agreed that the use of OSCEs as an assessment modality, as well as an assurance of the validity and reliability of each OSCE assessment, be incorporated into the review of the Assessment Strategy.

Standard 7 – Quality Assurance and Enhancement

Governance structures are in place for the delivery of the programme at both institutional and School level with Quality Review Procedures in place for degree programmes that comply with requirements at a national, College, School and Programme level and from Course to Module level. At School level, the Programme Management Committee (PMC) has responsibility for monitoring, reviewing and making recommendations on the development of the programme. Matters arising from this committee will be brought to the School Executive for consideration and ultimate approval before circulation to the School Committee. The School, through the Head, will inform the PSI of any on-going changes relevant to the running of the programme. Students will be notified of any updates to the student handbook, a copy of which will be made available through the School's website. All changes to the curriculum will in the first instance require approval by the PMC and ultimately approval by the School Executive, School Committee and, if necessary, University Council.

Module, year and course (for Year 5) co-ordinators are in place for the programme who will report directly to the Director of Undergraduate Teaching and Learning (DUTL) and in Year 5 of the programme to the Director of Postgraduate Teaching and Learning. The approach to external examinership for Years 4 and 5 will be different from the traditional approach in that the co-delivery of practice placements during these years will necessitate a collaborative process for external examinership between the three Schools. The team agreed that the documentation provided an excellent description of a high quality management structure.

Professional Practice Placements will be organised through APPEL and will be overseen centrally by a shared governance structure, 'the Board of APPEL', which will comprise the Heads of the Schools of Pharmacy, while RCSI will employ the National Coordinator and the operational support of APPEL. However, the institutions will retain the ultimate responsibility for the quality of placements for their own students. As at the paper-based review, the team agreed that the processes in place for the evaluation of the academic element of the programme were sound and fit for purpose. However, in relation to the quality assurance of APPEL functions, the team agreed that it would continue to seek **clarification**, at the next on-site visit, on how the three schools of pharmacy are to decide if the improvement initiatives that are implemented across the three schools have been standardized across the three schools, and if there is a contingency plan in place if some improvement plans are deemed to have been unsuccessful in one particular school of pharmacy. Additionally, as at the paper-based review, the team was aware that the role of the trainers/preceptors is crucial. It was not yet clear how they will relate to the three HEIs, how they will be trained and how they will be quality assured. The team, being cognisant that these will be the functions of APPEL, albeit with the accountability for quality assurance lying with each of the schools of pharmacy for their own degree programme, nevertheless

agreed that all of these aspects need to be **clarified** well in advance of the first placement, and will re-visit this issue at the next on-site visit.

Conclusion: The accreditation team was confident that this Standard will be met subject to the satisfaction of the above **clarifications**.

Standard 8 – Students

The programme is adequately described on various websites and in the College prospectus, and the School's Student Course Handbook is also available to prospective students on request. Minimum entry requirements are clearly stated to prospective students. The TCD Dignity and Respect policy ensures that the collegiate environment is free from discrimination in keeping with Equality law. The School website also now contains a statement relating to the fee for Year 5 of the programme. A full list of services available to students can be found on the TCD Student Homepage including a comprehensive description of the support mechanisms. Incoming students are invited to meet their assigned tutors personally at the beginning of their Junior Freshman year. The assigned tutors will follow the students throughout their course. Tutors act in a confidential manner as advisers on both academic and personal problems to provide advice to students where they can, or to put the student in contact with others who may be in a better position to provide help and advice. There is a Pharmacy Orientation day scheduled in the week before the start of the Michaelmas teaching term that includes presentations given by pharmacists practising in a variety of settings and from the Pharmaceutical Society of Ireland. Students are made aware of the School's Fitness to Practise Procedures, the Pharmacy Student Code of Conduct and the relevant College Regulations. Students are represented on the School Committee, the School Executive Committee and the Course Management Committee. In addition, a student-led Student Forum exists to gather student perspectives. Student surveys of all modules are regularly undertaken. Student survey results are considered by the Module Coordinator, Year Coordinators and the relevant Director of Teaching and Learning (Undergraduate or Postgraduate), who reports student surveys to the Programme Management Committee where appropriate action is decided. The relevant Director of Undergraduate Teaching and Learning and/or the module coordinator provide feedback to the student classes.

At the time of the paper-based review, the team agreed that clarification should be sought at the on-site visit, as to how admissions processes take account of the integration required to properly assure the educational experience of transfer students and attainment of the CCF. The Dean told the team that it was important that there was some degree of cooperation between the schools of pharmacy on this issue as the outcomes at the end of Year 4 will be the same. The Head of School added that it was a cause for concern that if one of the other schools waived the fees for Access students, this may place TCD at a competitive disadvantage in being able to attract such students.

Conclusion: The accreditation team was confident that this Standard will be met.

Summary and conclusions

The accreditation team agreed to recommend to the Council of the Pharmaceutical Society of Ireland that the recognition and approval of the Five-Year Fully Integrated Master's Degree Programme in Pharmacy provided by Trinity College Dublin for an initial period of two (2) years be confirmed with a further focussed on-site visit during the second year of delivery.

There were no conditions, however the following are required to be submitted to the PSI within the identified timeframes:

Standard 1: The Professional Degree Programme Provider and Mission

The Professional Degree Programme Provider must engage in a systematic planning process and have a current strategic plan that facilitates achievement of the Professional Degree Programme Provider's mission, goals and objectives.

The accreditation team was confident that this Standard can be met subject to the **requirement** that the School submit its updated and approved Strategic Plan including updated KPIs to the PSI by 30 April 2016. This because, although the Strategy was signed off by the School Executive in November 2015, it is currently with the Faculty Dean. A benchmarking exercise against European schools of pharmacy, particularly in the UK is currently being undertaken at the request of the Dean. The timelines for approval of School Strategic Plans have changed and College will not now be finalising School Strategies until early 2016, when there will be a process of review and sign-off by the Vice-Provost.

Additionally, it will be a **requirement** that the College inform the PSI of the progress of the scoping exercise related to the long-planned appointment of a chair in clinical pharmacy scoping exercise by 30 April 2016 with a final indication of the outcome by 30 September 2016. This is because the Faculty and College were unwilling to move to appointing to this post before a full scoping exercise had been carried out to assess the likelihood of being to make a suitable appointment with an appropriate research track record.

Standard 2: Leadership, Organisation and Governance

There must be clear management structures for the Professional Degree Programme with a schedule of roles and responsibilities, and a defined structure and process to show lines of accountability and authority for all those involved in the delivery of the Professional Degree Programme.

The accreditation team was confident that this Standard will be met.

Standard 3: Resource

The School must have sufficient allocated resources, financial, physical and staff, and have developed and documented contingency plans to cover any deficiencies that may arise in order to ensure the effective delivery of a Professional Degree Programme that continues to

meet the 'Accreditation Standards of the five-year fully integrated Master's degree programmes in pharmacy' as approved by the PSI Council from time to time.

The accreditation team was confident that this Standard can be met subject to the **requirement** for an update to be provided by 30 September 2016 on progress on the measures proposed to ensure that APPEL recruits and trains tutors that meet its specification, and how APPEL plans to increase numbers of practice placement opportunities to service the needs of the three schools of pharmacy. This is because the team was cognisant of the fact that APPEL was still in the development phase.

Standard 4: Curriculum

The curriculum must be planned to deliver an integrated learning experience that combines and co-ordinates all components in a logical and cohesive manner with clearly articulated linkages between and across units within years and between years. The Professional Degree Programme must be planned as a whole to deliver graduates who have the knowledge, skills, attitudes and behaviours to meet the Core Competency Framework for Pharmacists necessary for entry to the profession of pharmacy and to assure the accountability of the profession to society.

The accreditation team was confident that this Standard is likely to be met subject to the **requirement** that the School provide evidence by 30 September 2016 of how it is making increased efforts to embrace evolving concepts of pharmacy and of pharmacists' emerging roles in the delivery of healthcare. This is because although the team agreed that research-led teaching is strong in the School it considered that the curriculum would benefit from greater consideration of policy development and developments in pharmacy services. Additionally, it will be a **requirement** that an update be submitted to the PSI by 30 September 2016 as to how the pre-placement activity/learning will prepare students for placements, how readiness for placements will be assessed, and how students deemed unready for placement will be managed. This is because the team was aware that the process for the quality assurance of placements was not yet finalised.

Standard 5: Teaching and Learning Strategy

The Teaching and Learning Strategy must be designed to deliver a curriculum that produces graduates that meet the Core Competency Framework for Pharmacists as established by the PSI Council from time to time.

The accreditation team was confident that this Standard is likely to be met subject to the **requirement** that the School resubmit an updated version of its Teaching and Learning Strategy to the PSI by 30 September 2016. This is because the team needed to see how the School's approach to integration of the programme was planned to develop year by year.

Standard 6: Assessment Strategy

The Assessment Strategy must ensure that all graduates demonstrate the competencies set out in the Core Competency Framework for Pharmacists as established by the PSI Council from time to time. The strategy must align with the teaching and learning strategy (see Standard 5) and use effective and validated diagnostic, formative and summative assessment methods that are reviewed at frequent intervals and take account of developments in pharmacy practice within all components of the Professional Degree Programme.

The accreditation team was confident that this Standard is likely to be met subject to the **requirement** that the School resubmit an updated version of its Assessment Strategy to the PSI by 30 September 2016. This is to ensure that the assessment strategy is updated as integration of the programme proceeds.

Standard 7: Quality Assurance and Enhancement

All processes and activities related to the Professional Degree Programme must be clearly defined, documented, executed and controlled in accordance with a system of Quality Management which assures and demonstrates consistency, reproducibility and transparency of operations. There must be evidence that this process is being used to enhance the quality of the provision.

The accreditation team was confident that this Standard will be met.

Standard 8: Students

There must be processes at HEI and School level to assist prospective students in their application to the Professional Degree Programme., in securing and maintaining placements for the practice-placement elements of the Professional Degree Programme, and to support students' development as learners and as future practising professionals.

The accreditation team was confident that this Standard will be met.

The Provider should note that the Council of the Pharmaceutical Society of Ireland regards the report in its entirety as the view of the PSI on the provision, and that the Provider should take all the comments of the team into account in any development of the provision in response to this report.