Royal College of Surgeons in Ireland Coláiste Ríoga na Máinleá in Éirinn



National Pharmacy Internship Programme (NPIP) Curriculum Overview 2017-2019

RCSI DEVELOPING HEALTHCARE LEADERS WHO MAKE A DIFFERENCE WORLDWIDE

National Pharmacy Internship Programme Curriculum Outline

This document provides an overview of the National Pharmacy Internship Programme, provided by RCSI on behalf of the Pharmaceutical Society of Ireland. The programme fulfills the requirements of the interim in-service workplace-based practical training programme ("the Programme") for student pharmacists and Professional Registration Exam as set out in The Pharmaceutical Society of Ireland Education and Training Rules (S.I. No. 493 of 2008).

Note: Entry to the programme is subject to the following requirements. Students applying to enter the programme must have been awarded a Bachelor of Science in Pharmacy BSc (Pharm) from RCSI or The University of Dublin, Trinity College or a Bachelor of Pharmacy (B.Pharm) from University College Cork with relevant approval from the Head of School of each academic institution as set out in the Education and Training Rules 2008, and also complete all relevant administrative and statutory application requirements. Interns will exit the programme upon successful completion of all elements with the award of a Master of Pharmacy (M.Pharm).

1. Programme Aims

The primary aim of the programme is to ensure that graduates have obtained the designated learning and competencies appropriate for professional practice as a pharmacist. Graduates will practice pharmacy competently and work effectively within multiprofessional healthcare teams to ensure optimum standards of care for patients are achieved.

2. Programme Educational Aims and Learning Outcomes

Upon completion of the programme, graduates should possess and apply in practice, the academic and professional knowledge, skills and attitudes required to meet the designated competencies listed in the PSI Core Competency Framework (CCF). Completion of the programme will enable interns to bridge the gap between theory and practice through integration and application of prior knowledge and experience to their internship practice, and facilitate the development of further relevant knowledge, skills and attitudes under the supervision of a tutor pharmacist.

The M.Pharm Programme aims to

- Enable graduates to practice patient-centred care competently and confidently, possessing the required attributes to be pharmacist
- Develop a problem-centred and inquiry-based approach to learning
- Encourage critical thinking, reflective practice and a creative approach to problem-solving
- Develop graduates to become collaborative team-orientated professionals who can actively participate in the provision of healthcare as part of multiprofessional teams
- Encourage the graduates to work in an integrated, person-centred manner
- Enable graduates to advocate for patients and the profession of pharmacy
- Develop graduates who have a sense of personal and social responsibility

These are set out in the Programme Learning Outcomes (POs) to which the curriculum is mapped. Upon completion of the Programme, graduates should be able to:

- Integrate and apply expert knowledge of medicines, their appropriate use, and the professional skills of a pharmacist (PO1)
- Engage in scholarship and research to advance scientific knowledge, patient care and pharmacy practice (PO2)
- Apply the appropriate skills and knowledge needed to manage multiple roles in healthcare settings to provide expert care as part of the healthcare team (PO3)
- Manage themselves and others as appropriate to ensure continuity of high-quality and safe care to patients in complex professional settings (PO4)
- Recognise the importance of life-long learning for pharmacists and engage in continuing professional development (CPD) (PO5)
- Demonstrate professional attitudes and behaviours and social and cultural awareness in the delivery of care to diverse patients in society (PO6)

3. Programme Structure

The programme consists of two elements, a 12-month practice placement in an approved training establishment under the supervision of a tutor pharmacist and the supporting academic programme. The practice placement consists of 12 months of supervised practice either taken as one 12-month block or two 6-month blocks, with a minimum of 6 months spent in a clinical training establishment (community/hospital).

The intern must complete the equivalent of 'full-time' supervised practice per week, of which a minimum of three days per week with their designated tutor. The academic programme is designed to support learning in the training establishment. It consists of one orientation module, six taught modules and one research module. Modules are completed in parallel with the practice placement.

The M.Pharm programme carries 120 ECTS. The time spent learning in the training establishment and completion of the online elements contribute to the 15 ECTS carried by the six taught modules. These taught modules consist of 375 hours of learning, encompassing situated (practice-based) learning in the training establishment, completion of learning units and guided reading requirements, posting to the discussion forums, preparation for and completion of formative and summative assessment and attendance at compulsory face-to-face sessions in RCSI.

An overview of the programme structure is provided in Table 1. The research dissertation carries 30 ECTS. All modules are compulsory and interns must complete eight modules in total (including the non-credit bearing orientation module).

The learning outcomes for each module are mapped to Level 9 on the National Framework of Qualifications and the PSI Core Competency Framework (CCF).

Module Code	Module Name	PSI CCF Domain	ECTS	Type
MPO	Orientation	Not Applicable	0	Taught
MP1	Professional Practice	Domain 1	15	Taught
MP2	Personal Skills	Domain 2	15	Taught
MP3	Supply of Medicines	Domain 3	15	Taught
MP4	Safe and Rational Use of Medicines	Domain 4	15	Taught
MP5	Public Health	Domain 5	15	Taught
MP6	Organisation and Management Skills	Domain 6	15	Taught
MP7	Research Dissertation	Not Applicable	30	Research

Table 1: Overview of the Programme Structure

3.1 Module Structure

All modules follow the same six-week structure outlined in Table 2. Situated (practice-based) learning is supported by the completion of specified learning activities and assessments. Maintaining a uniform modular structure helps interns to plan their time and learning in a structured manner.

Table 2: Module Structure

Week(s)	Online Activity
Week 1	Completion of Learning Units/Prescribed Reading Activity/
	Formative Assessments
Weeks 2 & 3	Participation in Guided Reading/Group Activities
Weeks 4, 5 & 6	Preparation for and Completion of Summative Assessment
	(Individual/Group)

3.2 Mode of Study

The 6-week long taught modules are delivered sequentially over four semesters. An indicative schedule is included below in Table 3.

Table 3: Indicative Programme Schedule

	Modules				
Semester 1	MPO: Orientation Module ^a				
	MP1: Professional Practice				
	MP2: Personal Skills				
	Christmas Break				
Semester 2	MP3: Supply of Medicines ^b				
MP4: Safe and Rational Use of Medic					
	Easter Break ^c				
Semester 3 MP5: Public Health					
	MP6: Organisation and Management Skills				
Summer Break					
Semester 4	ster 4 MP7				
	Preparation/Study for PRE				

- a. All interns are required to attend RCSI for an Induction and Orientation Day
- b. Block attendance for skills teaching (usually one week duration) will happen annually, usually at the beginning
- of Semester 2 during Module 3. Attendance at these sessions is compulsory for all interns.
- c. The timing of the Easter break may vary annually

The primary method of learning for interns is under the supervision of their tutor as part of a wider team in an approved training establishment. This practice-based learning enables the interns to apply their knowledge and develop professional skills in a supportive, supervised environment. The interns are required to be present on a 'full-time' basis in their training establishment, and work a minimum of three full days per week with their tutor.

The online elements of the programme are delivered using a dedicated Virtual Learning Environment (VLE) designed for the programme. This will enable interns to access the course material easily from mobile devices (smartphones and tablets) as well as from laptops and desktop computers. The ePortfolio is integrated with the VLE.

Interns are expected to spend a minimum of 10 hours per week taking part in/completing required formal online activities during the modules. The online environment will facilitate the convergence of formal (structured) and informal (unstructured) learning.

3.3 Module Content

Each of the six taught modules comprises of 16 eLearning packages of 20-30 minutes duration (called Learning Units) that are made available to interns at the start of each module. A predominantly case-based approach is adopted, encouraging the interns to focus on how knowledge is applied and used in real-life settings, with a focus on *know-how*, rather than *know-what*. 'Guided reading' activities are used to foster collaboration between interns and stimulate small group discussion to generate discussion on practice issues. See section 5 for summary module descriptors.

4. Assessment Strategy

The assessment strategy is multimodal and aligns with the CCF and programme and module learning outcomes. The focus is on using methods that assess the interns' ability to apply knowledge and demonstrate skill in authentic or simulated environments. Online assessment is a component of each of the taught modules. Further detail on the modular assessment is included in the module descriptors below.

An outline of the summative assessment in the assessed taught modules is provided below in Table 4. The Orientation module is not summatively assessed. The research dissertation carries 30 ECTS and is assessed. All modules must be passed independently subject to Limited Compensation as provided for in the Marks and Standards for the relevant year of the programme...

Table 4: Overview of the Assessment Strategy for Taught Modules

Module	Workplace	Online	First Aid	PRE Part 1	PRE Part 2	Total	ECTS
	Assessment	Assessment		(MCQ)	(OSCE)		Credits
MP1	Pass/Fail	40%	n/a	n/a	60%	100%	15
MP2	Pass/Fail	40%	n/a	n/a	60%	100%	15
MP3	Pass/Fail	30%	n/a	10%	60%	100%	15
MP4	Pass/Fail	40%	Pass/Fail	n/a	60%	100%	15
MP5	Pass/Fail	40%	n/a	n/a	60%	100%	15
MP6	Pass/Fail	40%	n/a	n/a	60%	100%	15

4.1 Workplace Assessment

Assessment is completed against the CCF behavioural competencies by the intern (self-assessment) and tutor, formatively, and as a summative assessment at the end of the placement (the number and timing of these assessments will vary depending on the placement type and structure). The rating schedule is indicated below in Table 5. In order for an intern to have passed any taught module they must achieve a 'level 4' rating in all competencies and behaviours relevant to their placement(s) at the end of the internship year.

Table 5: Self- and Tutor-Assessment Rating Scale

Level	Rating	Definition	Percentage Expression
n/a	Cannot	Intern not exposed to this standard in the training establishment	n/a
1	Rarely	Very rarely meets the standard expected. No logical thought process appears to apply	0-20%
2	Sometimes	Much more haphazard than mostly	21-50%
3	Mostly	Implies standard practice with occasional lapses	51-84%
4	Consistently	Demonstrates the expected standard practice with vary rare lapses	85-100%

4.2 First Aid

All interns must complete a course in First Aid during block attendance. In order to pass the module MP4, interns must successfully complete First Aid training.

4.3 Part 1 of the Professional Registration Exam

Part 1 of the Professional Registration Exam consists of 40 MCQs in pharmaceutical calculations. This Part of the PRE must be passed independently of the other elements. Compensation is not allowed between Parts 1 and 2 of the PRE.

4.4 Part 2 of the Professional Registration Exam

Part 2 of the Professional Registration Exam is an Objective Structured Clinical Examination (OSCE). The exam consists of OSCE stations mapped to each module. This Part must be passed independently of the other elements. Compensation is not allowed between Parts 1 and 2 of the PRE.

5. Summary Module Descriptors

An overview of each taught module is included below. MP7 consists of a research dissertation topic that varies on an annual basis under the guidance of the Programme Director for Research.

Title: MPO: M.Pharm Orientation Module			
Learning Outcomes	Indicative Syllabus		
Upon completion of this module, interns should be able to Describe the aims of the M.Pharm Programme Discuss the statutory requirements associated with the National Pharmacy Internship Programme Outline the requirements for programme participation including attendance, coursework and assessment Locate modules and required resources on the VLE including the ePortfolio Discuss the benefits, challenges and requirements for students undertaking situated learning programmes Recognise the importance of appropriate communication in an online environment ('netiquette') List the supports available for interns from RCSI and explain how to access these services Use the discussion forum on the VLE to take part in a collaborative group discussion	Learning Units 1. Introduction to the Programme, Aims, Assessment and Attendance 2. Overview of the Statutory Requirements Relating to the M.Pharm 3. Using the Virtual Learning Environment (VLE) for Learning and Assessment 4. Using the ePortfolio 5. Completing Self and Tutor Competence Assessments on the VLE 6. Benefits and Challenges with Situated Learning 7. Working Online and 'Netiquette' 8. Working in Teams, Strategies for Success 9. Support for Interns- Who to ask for Help 10. RCSI Library Services, Catalogues and eBooks 11. What to Expect During the First Month, Experiences of Previous Interns 12. Time and Stress Management Techniques		

Title: MP1: Professional Practice				
Learning Outcomes	Indicative Syllabus			
Upon completion of this module, interns should be able to Practice in accordance with the behavioural standards identified in Domain 1 of the CCF Integrate relevant prior and developing knowledge and skill to ensure safe and effective patient care Demonstrate patient-centred care through evidence-based practice, patient advocacy, education and empowerment and recognition of patient rights Evaluate healthcare needs of patients on an ongoing basis with a view to identifying solutions to meet needs Practice professionally within scope of practice/competence while taking responsibility for own actions Demonstrate sensitivity, empathy, dignity and respect for others Relate and apply the provisions of the Pharmacy Act to practice Apply the provisions of Irish and European pharmacy law and regulatory requirements in practice Describe other legal provisions relevant to practice including professional indemnity requirements and how to apply them Apply the principles of the legislation and Statutory Code of Conduct for Pharmacists when making decisions Reflect critically to identify and undertake appropriate learning activities and programmes that meet identified learning needs and record the process in the ePortfolio	Learning Units 1. Patient-Centred Practice- Being 'Patient Centred' 2. Patient Rights in Practice 3. Being a Patient Advocate 4. Care of Vulnerable Patients 1: Extremes of Age 5. Care of Vulnerable Patients 2: Pregnancy 6. Care of Vulnerable Patients 3: Mental Health and Addiction 7. Why Do We Treat Patients? Monitoring Outcomes of Care 8. How do We Treat Patients? Evidence-Based Medicine and Integrated Care 9. Being 'Professional'. 10. Professionalism in Community, Hospital and non-clinical settings 11. The Pharmacy Act in Practice 12. Irish and European Medicines Law and Regulation in Practice 13. Applying the Statutory Code of Conduct in Practice 14. Approaches to Ethical Dilemmas in Practice 15. Informed Consent in Practice 16. Remaining Up-To-Date in Practice			

Title: MP2: Personal Skills				
Learning Outcomes	Indicative Syllabus			
Upon completion of this module, interns should be able to Practice in accordance with the behavioural standards identified in Domain 2 of the CCF Demonstrate leadership skills relevant to stage of training and development Recognise the role of bias and heuristics in decision-making and the importance of clinical reasoning skills Communicate decisions comprehensively including rationale with full consideration of the legal, professional, ethical and patient safety issues Use observational, analytical, critical thinking and creativity to develop and implement solutions that solve practical problems to produce and monitor safe and appropriate medicine use Participate, collaborate and advise on therapeutic decision making while including at transfer of care Recognise the services delivered to patients by others, their role and value in patient care and refer accordingly Communicate in a manner that facilitates positive interaction with patients colleagues, other healthcare professionals and the public Recognise patients' views about their health and medicine while demonstrating respect, cultural awareness, sensitivity and empathy	Learning Units 1. Developing and Using Leadership Skills 2. Clinical Decision Making Skills in Practice 3. Challenges in Clinical Decision Making 4. Patient Care in Practice 5. Communicating Decisions in Practice 6. Seeking Help With Decision Making: Learning From Others 7. Other Healthcare Professionals in a Multidisciplinary Team 8. Working With Other Healthcare Professionals: Barriers and Enablers 9. The Pharmacist in a Multidisciplinary Team 10. Medicines Information Queries 11. The Cambridge Calgary Model 1 12: The Cambridge Calgary Model 2 13. Communication With Challenges: Culture and Health Literacy 14. Communication With Challenges: Difficult Conversations 16. Building Positive Professional Relationships			
 Apply negotiation skills to resolve conflicts and problems Build and maintain positive relationships with patients, carers, other healthcare professionals, support staff and others 				

Title: MP3: Supply of Medicines				
Learning Outcomes	Indicative Syllabus			
Upon completion of this module, interns should be able to; Practice in accordance with the behavioural standards identified in Domain 3 of the CCF Demonstrate ability to complete pharmaceutical calculations Apply pharmaceutical knowledge and skills to formulate, compound and prepare formulations and select the optimal routes of administration Use legislation and guidelines including SOPs, GMP, and quality processes when preparing/documenting compounded medicinal products Manage the supply chain with consideration of authenticity of supplier, storage, stock management policies, GDP and legal requirements Review prescriptions in conjunction with available patient records to ensure authenticity and legality Complete a therapeutic review to ensure pharmaceutical and clinical appropriateness of medicines Screen and manage prescriptions or requisitions for clinical appropriateness Dispense, label, package and record supply of medicines in an organised, safe and systematic way with respect to legal requirements, interchangeable medicines, bioequivalence and SOPs Check own work and double-checks the work of others for accuracy and clinical appropriateness Counsel patients and/or carers on the appropriate, safe, and effective use of medicines Consult with prescribers for information and clarification and suggest appropriate alternatives where required in collaboration with the prescriber	Learning Units 1. Pharmaceutical Calculations 1 2. Pharmaceutical Calculations 2 3. Pharmaceutical Calculations 3 4. Formulations in Practice 5. Extemporaneous Compounding in Practice 6. Paediatrics 1 7. Paediatrics 2 8. Supply Chain and Stock Management 9. Prescription Validation (Revision of Legal Requirements) 10. Therapeutic Review of Prescriptions 11. Screening Prescriptions for Clinical Problems 12. Managing Clinical Prescription Problems with Other Healthcare Professionals 13: Dispensing Safely 1: The Dispensing Environment 14. Dispensing Safely 2: Accuracy Checking 15. Dispensing Safely 3: The Dispensing Process and Record Keeping 16. Counselling Skills: Dispensing a New Medicine			

Title: MP4: Safe and Rational Use of Medicines				
Learning Outcomes	Indicative Syllabus			
Upon completion of this module, interns should be able to; Practice in accordance with the behavioural standards identified in Domain 4 of the CCF Consult with patients/carers/other healthcare professionals to obtain a complete patient history (medical and social) Appropriately utilise the assessment of signs and symptoms in the recommendation of evidence-based action. Administer First Aid when required and manage follow-up care Provide evidence-based information to patients on complementary and alternative medicines and herbal remedies Counsel and educate patients on the correct use of their medicines using a structured approach having due regard for patient understanding, beliefs and context Design, recommend, monitor and evaluate patient-specific therapy commensurate with the healthcare needs of the patient and the scope of responsibility of the pharmacist as part of the healthcare team dentify, prioritise and resolve medicines management issues including inappropriate medicines, dosage problems, monitoring requirements and cost-effectiveness in collaboration with the patient and other healthcare professionals Identify and analyse the evidence-based therapeutic management of problems in patients with multiple disease states to determine appropriate monitoring regimens and management options Discuss approaches in quality improvement to prevent medicine-related problems and in the identification, assessment and management of those that occur (risk-management) Manage risk within the workplace though completion of audit activities, responding to new safety information and recognising high-risk drugs/procedures Manage near-misses and errors in the workplace and communicate openly with patients about errors when they occur	Learning Units 1. Patient Counselling and Beliefs About Medicines 2. Assessing Signs and Symptoms in Practice 3. Taking a Patient History (Medical and Social) 4. Non-Prescription Medicines for Complex Patients 5. First Aid and Self Care 6. Complementary and Alternative Medicines 7. The Medicines Management Programme 8. Counselling Complex Patients 9. Facilitating Concordance/Adherence to Treatments 10. Adverse Drug Reactions in Practice 11. Medication Safety In Practice 12. Pharmacovigilance in Practice 13. Management of Near-Misses and Errors in Practice 14. Communicating About Error with Patients 15. Human Factors in Patient Safety 16. Risk Management With High-Risk Drugs/Clinical Waste			

Title: MP5: Public Health				
Learning Outcomes		Indicative Syllabus		
	Practice in accordance with the behavioural standards identified in Domain 5 of the CCF Describe elements of socio-behavioural psychology relevant to health behaviour Demonstrate an appreciation of how social and public policies affect individuals health in society, in particular the social and economic context of health and illness experienced Identify barriers faced by patients in accessing health services and their relevance to pharmacy and individuals' health and aid patients in accessing these services Appreciate the interplay of medical, scientific, social, cultural, political, economic and ethical issues in the promotion of health and wellbeing Discuss contemporary national health policy, planned reform and HSE reports applicable to public health and pharmacy Identify the risks to public health from communicable and non-communicable disease including, smoking, alcohol, obesity, social exclusion and an ageing population Provide evidence-based information, advice and education for patients and the public on health awareness, disease prevention and control and health lifestyle and wellness for a specific situation (need and target person/group) Discuss current and potential roles for pharmacists in the promotion of health and well-being in society Discuss key challenges in global health and how global change (environmental, economic, political, technological and social) impacts on health worldwide Explain how and why community organisations deliver their services Apply principles of scientific enquiry to investigate a medicine or practice related issue	Learning Units 1. Facilitating Health Behaviour Change 2. Social Determinants of Health 3. Health Policy in Ireland 4. Health Across the Life Course 5. Measuring Health and Disease in the Community 6. Principles and Practice of Health Promotion 7. Smoking, Alcohol and Drugs 8. Cardiovascular Disease, Diabetes and Obesity 9. Sexual Health and Contraception 10. Mental Health 11. Cancer 12. Public Health and Immunisation 13. Planning and Delivering Health Promotion and Screening 14. Global Health Challenges and Impact on Practice (Travel Health) 15. Research Skills 1 16. Research Skills 2		

Title: MP6: Organisation and Management Skills				
Learning Outcomes		Indicative Syllabus		
Upon completion of this r Practice in according of the CCF Demonstrate orgonism and process Contribute to the operationalisation incidents Apply principles	module, interns should be able to; dance with the behavioural standards identified in Domain 6 ganisation and efficiency in carrying out work by planning work ses evidence-based development, implementation and n of improvements in service through reflection on critical of organisational behaviour and change management within	Learning Units 1. Effective Time Management 2. Critical Incident Analysis 3. Organisational Behaviour 4. Principles of Change Management 5. Developing and Using Standard Operating Procedures 6. Supervising Other Staff: Responsibilities and Challenges 7. Training Other Staff		
documented pro-	rk within standard operating procedures and other cedures and policies ble of the pharmacist in supervising and training non-	8. Giving Feedback 9. Principles of Management Accounting 10. Principles of Financial Accounting		
Use appropriateDemonstrate the informationDemonstrate aw	coaching and feedback techniques when training other staff ability to analyse and manage financial data and budgetary areness of the health service reimbursement schemes les of pharmacoeconomic assessment and medicines cost-	 11. Submitting Pharmacy Claims for Reimbursement 12. Introduction to Health Economics 13. Cost Effectiveness Analysis, Cost Utility Analysis, Cost Benefit Analysis 14. Use of Economic Analysis to Guide Decision-Making in Healthcare 15. Quality Assurance 16. Using Complaints and Audit to Improve Services 		
Contribute to reg Manage risk in the	pular audit activities and report and act upon the findings ne workplace om complaints and audit to improve and develop services with and other team members	10. Coming Complaints and Addit to Improve Convices		

