INSTITUTE
OF MEDICINE

ROYAL COLLEGE OF
PHYSICIANS OF IRELAND

HIGHER SPECIALIST TRAINING IN

CLINICAL PHARMACOLOGY & THERAPEUTICS & GENERAL INTERNAL MEDICINE

OUTCOME-**B**ASED **E**DUCATION – OBE CURRICULUM

This Curriculum of Higher Specialist Training in Clinical Pharmacology and Therapeutics and General Internal Medicine was developed in 2023 by a working group led by Professor David Williams, National Specialty Director, and the RCPI Education Department. The Curriculum undergoes an annual review process by the National Specialty Director and the RCPI Workplace Education Team. The Curriculum is approved by the Specialty Training Committee and the Institute of Medicine.

Version	Date Published	Last Edited By	Version Comments
1.0	July 2025	Stephen Capper	No edits from the previous year

National Specialty Director's Foreword

The Higher Specialist Training Programme in Clinical Pharmacology and Therapeutics commenced in 1997. There is a need to maintain a pool of expertise in the Irish Healthcare system where medicines constitute the main intervention in healthcare. There is also a need to deliver essential undergraduate and ongoing, lifelong postgraduate teaching in Clinical Pharmacology and to train specialists in Clinical Pharmacology & Therapeutics in order to maintain a critical mass in the Irish Healthcare setting.
Clinical Pharmacology and Therapeutics continues to contribute to national activities such as rational and safe prescribing, drug licensing, technology appraisal, pharmacoeconomics and pharmacovigilance and more recently Stroke Medicine.

All healthcare providers should aim to encourage rational prescribing practices and balance medicines budgets through activities such as Drug and Therapeutics committees, formulary management, and reviews of drug use. Whilst these activities are not the preserve of Clinical Pharmacologists, they are, however, ideally prepared, following training in medicine development and use, and have a working understanding of the work of the pharmaceutical industry. These skills are also essential for teaching rational therapeutics to medical students and prescribers, managing drug overdoses, and advising research ethics committees.

The Outcome Based Education (OBE) project concerned the transition of the current minimum requirements model of the clinical pharmacology and therapeutics curriculum and training to OBE, which is more in line with other countries in Europe and the US. It was one of the key initiatives of the RCPI's Strategic Plan 2021 – 2024, which aims to enhance the quality of Ireland's BST and HST training programmes to ensure they are aligned with international best practices and standards. This involves a considerable change to both the structure and assessment of the curriculum, and as such, requires input from multiple stakeholders to ensure that any changes are valid and robust.

The new and revised curriculum in CPT is designed to attract high-quality trainees into the discipline by providing the flexibility necessary to allow doctors in different branches of clinical medicine to undergo training in Clinical Pharmacology and Therapeutics and to provide links with an Academic training pathway. It aims to achieve this flexibility by adopting a modular structure, all trainees taking the core module but with additional modules, usually of one year's duration, from within the range of CPT special interests (e.g., Hypertension, Stroke Medicine) according to their specific training requirements.

We hope that this document will provide guidance, both for the trainees on this training journey, and to trainers, to allow for meaningful dialogue, feedback, and support. The goal of this document is to enhance training and prepare future clinical leaders in Clinical Pharmacology and Therapeutics. There were many people involved in the compilation of this document and we thank them all. We wish all our trainees' good luck as they embark on their training and their clinical careers.

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1. INTRODUCTION

This section includes an overview of the Higher Specialist Training programme and of this Curriculum document.

1.1. Purpose of Training

This programme is designed to provide training in Clinical Pharmacology & Therapeutics and General Internal Medicine (GIM) in approved training posts, under supervision and to fulfil agreed curricular requirements over the course of 5 years. Each post provides a trainee with a named trainer and the programme is under the direction of the National Specialty Director in Clinical Pharmacology & Therapeutics.

1.2. Purpose of the Curriculum

The purpose of the Curriculum is to guide the Trainee towards achieving the educational outcomes necessary to work as an independent Clinical Pharmacologist. The Curriculum defines the relevant processes, content, outcomes, and requirements to be achieved. It stipulates the overarching goals, outcomes, expected learning experiences, instructional resources and assessments that comprise the Higher Specialist Training (HST) programme. It provides a framework for certifying successful completion of HST programme.

In keeping with developments in medical education and to ensure alignment with international best practice and standards, the Royal College of Physicians (RCPI) has implemented an Outcomes Based Education (OBE) approach. This curriculum design differs from traditional minimum time-based requirement designs in that the learning process and desired end-product of training (outcomes) are at the forefront of the design to provide the essential training opportunities and experiences to achieve those outcomes.

1.3. How to use the Curriculum

Trainees and Trainers should use the Curriculum as a basis for goal-setting meetings, delivering feedback, and completing assessments, including appraisal processes (Quarterly Assessments/End of Post Assessment, End of Year Evaluation). Therefore, it is expected that both Trainees and Trainers familiarise themselves with the Curriculum and have a good working knowledge of it.

Trainees are expected to use the Curriculum as a blueprint for their training and record specific feedback, assessments, and training events on ePortfolio. The ePortfolio should be updated frequently during each training placement.

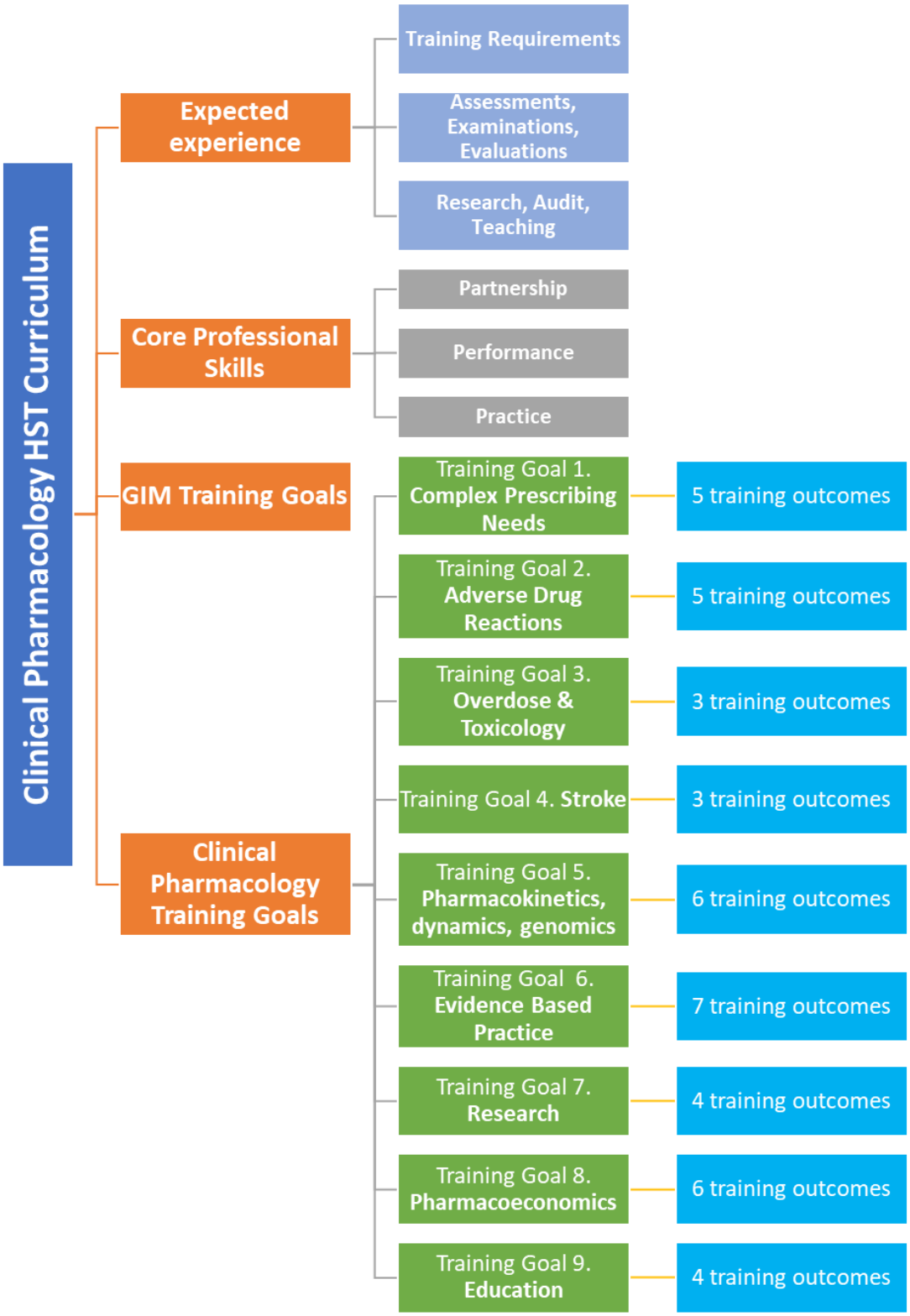
It is important to note that ePortfolio is a digital repository designed to reflect Curriculum requirements. It facilitates recording of progress through HST and evidence that training is valid and appropriate. While a complete ePortfolio is essential for HST certification, Trainees and Trainers should always refer to the Curriculum in the first instance for information on the requirements of the training programme.

Please note: It is the responsibility of the Trainee to keep an up-to-date ePortfolio throughout the programme as it reflects their individual training experience and it documents that they have successfully met training standards as expected by the Medical Council.

1.4. Reference to rules and regulations

Please refer to the following sections within the Clinical Pharmacology & Therapeutics HST Training Handbook for rules and regulations associated with this post. Policies, procedures, relevant documents, and Training Handbooks can be accessed on the RCPI website following this link.

1.5. Overview of Curriculum Sections and Training Goals



2. EXPECTED EXPERIENCE

This section details the training experience, and the service provision tasks that all Trainees are expected to complete throughout the Higher Specialist Training.

2.1. Duration & Organisation of Training

Whilst the curriculum is competency-based, the duration of training must meet the European Minimum of four years for full time specialty training adjusted accordingly for flexible training. Therefore, the duration of HST in Clinical Pharmacology & Therapeutics and General Internal Medicine is five years, one year of which may be gained from a period of full-time research or other academic endeavour during the Out of Clinical Programme Experience (OCPE).

Core Training: Trainees must spend the first two years of training in clinical posts in Ireland before undertaking any period of research or OCPE. The earlier years of training will usually be directed towards acquiring a broad general experience of Clinical Pharmacology & Therapeutics and GIM under the appropriate supervision. An increase in the content of hands-on experience follows naturally, and, as confidence is gained and abilities are acquired, the trainee will be expected to assume a greater degree of responsibility and independence.

Trainees on the HST programme in Clinical Pharmacology & Therapeutics are given a rotation of posts at the start of the programme which encompasses the first two years of training at a minimum. Each rotation will provide the trainee with experience in different hospitals so as to acquire the broad range of training required. A degree of flexibility to meet the individual training needs is possible especially towards the end of the training programme following discussion with the NSDs. Each post within the programme will have a named trainer/educational supervisor and programmes will be under the direction of the NSD for Clinical Pharmacology & Therapeutics or, in the case of GIM, the Regional Specialty Advisor. Programmes will be as flexible as possible consistent with curricular requirements, for example to allow the trainee to develop a sub-specialty interest. The experience gained through rotation around different departments is recognised as an essential part of HST. It is preferable that a SpR does not remain in the same unit for longer than 2 years of clinical training or with the same trainer for more than 1 year. However, given that Clinical Pharmacology and Therapeutics is a small speciality, there is flexibility in this respect and a trainee will most likely spend 2 years with the same trainer.

Out of Clinical Programme Experience: Trainees can undertake one, or more years out of their HST programme to pursue research, further education, special clinical training, lecturing experience, or other relevant experiences.

OCPE must be preapproved, and retrospective credit cannot be applied.

It must be noted that even if trainees can undertake more than one year to complete their OCPE of choice, RCPI would award a maximum of 12 months of training credits towards the achievement of CSCST. In certain circumstances, RCPI may award no credits. The decision of whether to award credits for one year may differ from specialty to specialty and it is discretionary by the NSDs of each respective specialty.

For more information on OCPE, please refer to the RCPI website (here).

Training Principles: During the period of training the Trainee must take increasing responsibility for seeing patients, undertaking ward consultations, making decisions, and operating at a level of responsibility which would prepare them for practice as an independent Consultant. Over the course of HST, Trainees are expected to gain experience in a variety of hospital settings.

Core Professional Skills: Generic knowledge, skills and attitudes support competencies that are common to good medical practice in all the medical and related specialties. It is intended that all Trainees should re-affirm those competencies during HST. No timescale of acquisition is imposed, but failure to make progress towards meeting these important objectives at an early stage would cause concern about a Trainee's suitability and ability to become an independent specialist.

Dual Specialty Training: GIM training is expected to be completed in the first 3 years of the programme. One of these years is a GIM specific year. During the other two years trainees must complete their GIM training as per their expected experience, including general medicine on-call commitment for acute unscheduled/emergency care with attendance at relevant post-take rounds.

Acute Medicine: There must be evidence of direct supervision of the activity of the more junior members of the "on-take" team and a minimum of 10 (480 per year) new acute medical assessments and admissions during the 24-hour period are expected during the GIM specific year. In addition, the trainee is expected to record a minimum of 480 new acute medical assessments and admissions over the course of their two Dual Specialty training years. The trainee will be expected to have ongoing care/responsibility for a proportion of the patients for the duration of the clinical inpatient journey as well as the follow up post discharge. In this capacity the trainee should develop skills in non-technical aspects of care including discharge planning and end of life care.

Inpatient Responsibilities: The trainee will have front line supervisory responsibilities for Clinical Pharmacology & Therapeutics and general medical inpatients. This will require supervising and supporting the activities of the more junior members (SHO/Intern) of the clinical team. In addition to personal ward rounds, a minimum of two ward rounds with the consultant each week is expected for educational experience. Ongoing responsibility for shared care of the team's inpatients whilst in the ITU/HDU/CCU is also essential. If this is not possible in a particular hospital/training institution, opportunity to obtain this experience in other institutions or with a period of secondment is required.

Outpatient Responsibilities: The trainee is expected to have personal responsibilities for the assessment and review of Clinical Pharmacology & Therapeutics and General Medicine outpatients with a minimum of at least one consultant led clinics per week. The trainee should assess new patients; access to consultant opinion/supervision during the clinic is essential.

Procedures: The trainee should acquire the practical skills that are needed in the management of medical emergencies, particularly those occurring out of normal working hours. Some exposure to these skills may have occurred during the period of BST but this experience must be consolidated, and competencies reviewed during HST.

Essential & Additional Experience: The trainee will be expected to have had experience of/be familiar with the management of a wide range of cases presenting to hospitals as part of an unselected acute medical emergency "take". Whilst trainees will not need to be expert in all these areas, they will be expected to be able to plan and interpret the results of immediate investigations, initiate emergency therapy and triage cases to the appropriate specialist care. These emergency situations have been considered under each specialty section and are indicative of what should be covered but are not prescriptive. It should form the basis of regular discussions between the trainee and trainers as training progresses. The various clinical situations listed for experience have been divided into those, which are considered "essential" and others, which are "additional".

Recording of Evidence of training: The target numbers for training items in the following sections represent the minimum recording requirement to document evidence of relevant and varied clinical experience; it is understood that the actual number of training experiences is likely to be well in excess of these numbers.

2.2. Clinics list, Ward Rounds and Consultations, Training Activities

Attendance at Clinics, participation in Ward Rounds and Patient Consultations are required elements of all posts throughout the programme. The timetable and frequency of attendance should be agreed with the assigned trainer at the beginning of the post.

This table provides an overview of the expected experience a Trainee should gain regarding clinic attendance, ward rounds and consultations. All these activities should be recorded on ePortfolio using the respective form.

Where there is a numeric reference for a training activity, this should be interpreted as an indication of the ideal frequency rather than a minimum requirement. However, Trainees are recommended to exceed these numbers and to always seek advice from their Trainers to agree on the frequency of each training requirement. Each Trainee may need to record training experiences at a different frequency, depending on their rotations, posts, and level of training.

ON CALL ROTA **Unselected Admissions for General Internal Medicine (Completed in first 3 years)**		
Clinic	**Expected Experience**	**ePortfolio Form**
GIM Year	Record 480 over the course of GIM specific year	Clinical Activities
Dual Specialty Years	Record 480 over the course of 2 Dual Specialty years	
OUTPATIENT CLINICS		
Type	**Expected Experience**	**ePortfolio Form**
Clinical Pharmacology & Therapeutics Clinics	Attend at least 1 per week over the course of HST, record attendance	Clinics
WARD ROUNDS/CONSULTATIONS		
Type	**Expected Experience**	**ePortfolio Form**
Consultant Led Ward Rounds	Attend at least 1 per week over the course of HST, record attendance	Clinical Activities
SpR Led Ward Rounds	Attend at least 1 per week over the course of HST, record attendance	
Consultations	Attend at least 1 per week over the course of HST, record attendance	
HOSPITAL PRESCRIBING GUIDELINES		
Type	**Expected Experience**	**ePortfolio Form**
Draft Hospital Prescribing Guidelines	Record at least 1 to 2 examples per year of HST	Policies & Guidelines
PRESCRIBING FOR COMMON CASES		
Type	**Expected Experience**	**ePortfolio Form**

Record of prescribing for common cases	Record at least 20 examples over the course of HST	Cases
ADDITIONAL/SPECIAL EXPERIENCE GAINED		
Type	**Expected Experience**	**ePortfolio Form**
National Centre for Pharmacoeconomics (NCPE) or National Medicines information Centre (NMIC)	Record 1 over the course of HST	Additional Special Experience
Provide advice to local ED or poisons unit	Record 1 over the course of HST	
Attachment to National Poisons Centre at Beaumont Hospital	Record 1 over the course of HST	
Time spent in Clinical trial unit	Record 1 over the course of HST (Desirable)	
Making a submission for a clinical trial/Presenting a trial to an ethics committee	Record 1 over the course of HST (Desirable)	
EMERGENCY/COMPLICATED/UNUSUAL/CHRONIC CASES		
Type	**Expected Experience**	**ePortfolio Form**
Emergency/Complicated Cases	Record 12 per year of HST	Cases
Unusual Cases	Record 24 over the course of HST	
Adverse Drug Reaction (ADR) reporting/analysis/risk assessment	Record 36 over the course of HST	
Deprescribing experience: Geriatric/Polypharmacy/Rationalisation of medications	Record 36 over the course of HST	
Prescribing within a Multidisciplinary Team e.g., Monoclonal antibodies in Dermatology/Rheumatology/Gastroenterology/Immunology	Record 36 over the course of HST	
MANAGEMENT / LEADERSHIP EXPERIENCE		
Type	**Expected Experience**	**ePortfolio Form**
Drugs and Therapeutics Committee/ Formulary Committee attendance	Record 24 over the course of HST	Management Experience
Other examples of Management/Leadership Experience	Record 24 over the course of HST (Desirable)	

2.3. In-house commitments

Trainees are expected to attend a series of in-house commitments as follows:

- Attend at least **1 Grand Round per month**, during clinical years over the course of HST
- Attend at least **1 Journal Club per Month** during clinical years over the course of HST
- Attend at least **6 Radiology Conferences per year**, during clinical years over the course of HST
- Attend at least **1 MDT Meeting per month**, during clinical years over the course of HST
- Attend and participate in a variety of learning experiences including but not limited to seminars, lectures, case discussions, case conferences etc… (1 per month during clinical years over the course of HST)

2.4. Research, Audit and Teaching Experiences

Trainees are expected to complete the following activities:

- Deliver **2 teaching sessions per month** (to include tutorials, lectures, bedside teaching, etc.) during clinical years of HST
- Complete **1 Audit** per clinical year
- Complete **1 Quality Improvement Project** over course of HST
- Deliver **2 Oral presentation or Poster presentation** (hospital wide forum, journal clubs, inter hospital opportunities) per each year of HST
- Attend **1 National or International Meeting** (Can be recorded as study day), per each year of HST
- Attend **24 Formulary/Drugs and Therapeutics committees** to support development of formularies over the course of HST
- Contribute to **1 Clinical Trial**, over the course of HST

In addition, it is recommended that trainees aim to

- Complete minimum **2 publications**, over the course of HST

2.5. Teaching attendance

Trainees are expected to attend all the courses and study days as detailed in the Teaching Appendix, at the end of this document.

Trainees should attend 80% of the formal teaching opportunities available within the Clinical Pharmacology & Therapeutics/GIM HST.

2.6. Assessments and Evaluations

- Complete personal goals evaluation at the start of each clinical training year, targeting training opportunities that are available at each clinical site, and focusing on personal development and completion of ePortfolio.
- Complete **4 quarterly assessments per training year with their designated trainer** (1 assessment per quarter)
- Complete **1 end of post evaluation at the end of each post** (this can replace the quarterly assessment in happening at the end of a post)
- Complete **1 end of year evaluation at the end of each training year**
- Complete all the **workplace-based assessments** as appropriate, and as agreed with Trainer. It is recommended to **record at least 1 WBA** (CBD, MiniCEX, or DOPS) **per quarter** to be reviewed at the Quarterly Assessment.
- For more information on evaluations and assessments, please refer to the Assessment Appendix at the end of this document.

2.7. Summary of Expected Experience

Experience Type	Expected	ePortfolio form
Rotation Requirements	Complete all agreed requirements related to the post.	n/a
Personal Goals	At the start of each post complete a Personal Goals form on ePortfolio, agreed with your trainer and signed by both Trainee & Trainer.	Personal Goals
On-call Commitments	Partake in on-call commitments in Clinical Pharmacology & Therapeutics for the full duration of the programme and GIM where appropriate and record attendance on ePortfolio.	Clinical Activities
Clinics	Attend Clinical Pharmacology & Therapeutics Clinics and Subspecialty Clinics as agreed with your trainer and record attendance per each post on ePortfolio.	Clinics
Consultations	Gain experience and develop competence in all aspects of Clinical Pharmacology & Therapeutics consults with increasing independence over the course of training and as agreed within each post, recording on ePortfolio.	Clinical Activities
Ward Rounds	Gain experience and competence in the management of medical and Clinical Pharmacology & Therapeutics inpatients, acknowledging the role of clinical handover and leading out on ward rounds as agreed with your trainer and record attendance per each post on ePortfolio.	Clinical Activities
Emergencies/Complicated Cases	Gain experience in clinical emergencies/complicated cases as indicated above an as agreed with Trainer. Record cases on ePortfolio	Cases
Procedures, Practical/Surgical Skills	Gain experience in procedural, practical, surgical skills as indicated above an as agreed with Trainer. Record experience on ePortfolio	Procedures, Skills & DOPS
Additional/Special Experience	Gain additional/special experience as indicated above an as agreed with Trainer. Record cases on ePortfolio	Additional Special Experience/Cases
Management Experience	Gain experience in clinical management and leadership functions as agreed with Trainer. Record attendance per each post on ePortfolio	Management Experience
Deliver Teaching	Deliver Tutorials, Lectures and Bedside teaching. Record a minimum of 2 examples per month of HST on ePortfolio	Delivery of Teaching
Research	Desirable Experience: actively participate in research, aim to contribute to 1 clinical trial over the course of HST. Seek opportunities to publish papers and present research at conferences or national/international meetings.	Research Activities
Publication	Complete a minimum of 2 publications over the course of HST.	Additional Professional Activities
Presentation	Deliver 2 oral or poster presentation per each year of HST.	Additional Professional Activities
Audit and QI	Complete 1 Audit per clinical year and 1 Quality Improvement Project over the course of HST.	Audit and QI

Attendance at Hospital Based Learning	Attend at least 1 Grand Round per month per clinical year of HST, attend at least 1 Journal Club per month per clinical year of HST. Attend at least 1 MDT Meeting per month per clinical year of HST. Attend 6 Pathology conferences per clinical year of HST. Attend and participate in a range of learning experiences including but not limited to seminars, lectures, case discussions/conferences (1 per month per clinical year of HST). Record attendance on ePortfolio.	Attendance at Hospital Based Learning
National/International Meetings	Attend 1 per year of HST (can be recorded as study day).	Additional Professional Activities
Teaching Attendance	Engage with Taught Programme and Study Days as detailed in the Teaching Appendix. Trainees should attend at least 80% of the formal teaching opportunities available within Clinical Pharmacology & Therapeutics and GIM HST.	Teaching Attendance
Workplace-based Assessment	Complete all the workplace-based assessment as agreed with your trainer and complete the respective form.	CBD/DOPS/Mini-CEX
Examinations	N/A	Examinations
Evaluations and Assessments	Complete a Quarterly Assessment/End of post assessment with your trainer 4 times in each year. Discuss your progress and complete the form.	Quarterly Assessments/End-of-Post Assessments
End of Year Evaluation	Prepare for your End of Year Evaluation by ensuring your portfolio is up to date and your End of Year Evaluation form is initiated with your trainer.	End of Year Evaluation

3. CORE PROFESSIONAL SKILLS

This section includes the Medical Council guidelines for medical professional conduct, regarding Partnership, Performance and Practice.

These principles are woven within training practice and feedback is formally provided in the Quarterly Evaluations, End of Post, End of Year Evaluation.

Partnership

Communication and interpersonal skills

- Facilitate the exchange of information, be considerate of the interpersonal and group dynamics, and have a respectful and honest approach
- Engage with patients and colleagues in a respectful manner
- Actively listen to the thoughts, concerns, and opinions of others
- Consider data protection, duty of care and appropriate modes of communication when exchanging information with others

Collaboration

- Collaborate with patients, their families, and your colleagues to work in the best interest of the patient, for improved services and to create a positive working environment
- Work cooperatively with colleagues and team members to deliver an excellent standard of care
- Seek to build trust and mutual respect with patients
- Appropriately share knowledge and information, in compliance with GDPR guidelines
- Take on-board available, relevant feedback

Health Promotion

- Communicate and facilitate discussion around the effect of lifestyle factors on health and promote the ethical practice of evidence-based medicine
- Seek up-to-date evidence on lifestyle factors that:
    - negatively impact health outcomes
    - increase risk of illness
    - positively impact health and decrease risk factors
- Actively promote good health practices with patients individually and collectively

Caring for patients

- Take into consideration patient's individuality, personal preferences, goals, and the need to provide compassionate and dignified care
- Be familiar with
    - Ethical guidelines
    - Local and national clinical care guidelines
- Act in the patient's best interest
- Engage in shared decision-making and discuss consent

Performance

Patient safety and ethical practice

- Put the interest of the patient first in decisions and actions
- React in a timely manner to issues identified that may negatively impact the patient's outcome
- Follow safe working practices that impact patient's safety
- Understand ethical practice and the medical council guidelines
- Support a culture of open disclosure and risk reporting
- Be aware of the risk of abuse, social, physical, financial, and otherwise, to vulnerable persons

Organisational behaviour and leadership

- The activities, personnel and resources that impact the functioning of the team, hospital, and health care system
- Understand and work within management systems
- Know the impacts of resources and necessary management
- Demonstrate proficient self-management

Wellbeing

- Be responsible for own well-being and health and its potential impact on the provision of clinical care and patient outcomes
- Be aware of signs of poor health and well-being
- Be cognisant of the risk to patient safety related to poor health and well-being of self and colleagues
- Manage and sustain your own physical and mental well-being

Practice

Continuing competence and lifelong learning

- Continually seek to learn, improve clinical skills and understand established and emerging theories in the practice of medicine
- Meet career requirements including those of the medical council, your employer, and your training body
- Be able to identify and optimise teaching opportunities in the workplace and other professional environments
- Develop and deliver teaching using appropriate methods for the environment and target audience

Reflective practice and self-awareness

- Bring awareness to your actions and decisions and engage in critical appraisal of your own work to drive lifelong learning and improve practice
- Pay critical attention to the practical values and theories which inform everyday practice
- Be aware of your own level of practice and your learning needs
- Evaluate and appraise your decisions and actions with consideration as to what you would change in the future
- Seek to role model good professional practice within the health service

Quality assurance and improvement

- Seek opportunities to promote excellence and improvements in clinical care through the audit of practice, active engagement in and the application of clinical research and the dissemination of knowledge at all levels and across teams
- Gain knowledge of quality improvement methodology
- Follow best practices in patient safety
- Conduct ethical and reproducible research

4. GENERAL INTERNAL MEDICINE SECTION

This section includes the General Internal Medicine requirements that the Trainee should demonstrate proficiency in by the end of the higher specialist training.

In order to demonstrate proficiency, it is recommended to agree the most appropriate training and assessment methods with the assigned Trainer.

By the end of Higher Specialist Training the Trainee will be able to identify and treat immediate life-threatening causes of common medical presentations, form a differential diagnosis for non-life-threatening cases and effectively manage the patient including further investigation and appropriate referral. They will have acquired a broad range of procedural and clinical skills to manage diverse presentations.

Assessment and Learning Methods

Learning opportunities during HST are through:

- Self-Directed Learning
- Attendance at Study days and other educational supports within the training program
- Participation in In-house activities
- Unselected acute on call
- General Medicine outpatient clinics
- Department education sessions (black box, journal club, tutorials)
- Completion of Required courses
- Attendance at additional learning events such as recommended courses and masterclasses

Progress is assessed through:

- Case Based Discussion (CBD)
- ePortfolio
- Quarterly trainer assessment
- Annual assessment
- Direct Observation of Procedural Skills (DOPS)
- Mini Clinical Examination Exercise (MiniCEX)

In the Acute Setting

During the course of HST the trainee will encounter common acute presentations and will be expected to demonstrate the following competencies:

- Recognising and assessing urgency
- Stabilising the patient
- Prioritising
    - Tasks
    - Investigations
- Managing co-existing morbidities
- Making appropriate referrals
- Decision making and appropriate delegation

The presentations listed in this section represent the most common acute presentations and conditions currently seen in Irish hospitals, accounting for over 95% of admissions. It is expected that

HST trainees in general internal medicine will have a comprehensive knowledge of, and be able to provide a differential diagnosis for, these conditions.

Presentations

1. Shortness of breath
2. Cough
3. Chest Pain
4. Blackout/ Collapse/ Dizziness
5. The frail older patient in the acute setting
6. Abdominal Pain
7. Fever
8. Alcohol and substance dependence or withdrawal
9. Falls and Decreased mobility
10. Weakness and Paralysis
11. Headache
12. Limb Pain and/or Swelling
13. Nausea and Vomiting
14. Seizure
15. Diarrhoea
16. Delirium/Acute confusion
17. Acute Psychological illness
18. Palpitations
19. Hepatitis or Jaundice
20. Gastrointestinal Bleeding
21. Haemoptysis
22. Rash
23. Acute Back Pain
24. Poisoning and Drug Overdose
25. Hyper-glycaemia

Emergency Management

Recognising and managing emergency cases including:

- Acute Coronary Syndrome
- Acute Kidney Injury
- Acute Respiratory Failure
- Acute Seizure
- Anaphylaxis / Angioedema
- Cardio-respiratory arrest
- Critical electrolyte abnormalities (calcium, sodium, potassium)
- Hypo- or Hyperglycaemia
- Sepsis and septic shock
- Stroke/ TIA
- The unconscious patient
- Unstable hypotensive patient

Skills and Knowledge in General Medicine Setting

By the end of Higher Specialist Training, the Trainee should know life threatening causes, clinical feature, classifications, investigations, and management, including indications for urgent referral, for common general medicine presentations. The following outlines commonly associated features, causes and/or routes of investigation for these presentations, both acutely and for ongoing case management, the trainee is expected to know and the competencies they are expected to demonstrate.

When a patient presents with a general medicine complaint the trainee is expected to demonstrate an ability to:

- Assess their signs and symptoms, formulating a differential diagnosis
    - Take history as part of an investigation
    - Undertake primary assessment
    - Recognise and assess urgency
    - Undertake secondary assessment
- Initiate appropriate investigations
    - Interpret results for common investigations
- Initiate appropriate treatment, including stabilising the patient where necessary
- Manage co-existing morbidities
- Manage on-going cases including
    - confirming a diagnosis for those not requiring urgent referral
    - assessing response to initial treatment
    - recognising signs to escalate management when needed
- Appropriately refer based on:
    - Response to treatment
    - Local guidelines
    - Culture
    - Self-awareness of their own knowledge and ability
    - Services available
- Provide ongoing management of the case

Shortness of breath

When a patient presents with shortness of breath a trainee is expected to demonstrate knowledge of the clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for common causes.

- Life threatening causes of breathlessness
    - Airway Obstruction
    - Acute severe asthma
    - Acute exacerbation of COPD
    - Pulmonary oedema
    - Tension pneumothorax
    - Acute presentations of Ischaemic heart disease
    - Acute severe left ventricular failure
    - Dysrhythmia
    - Pulmonary embolus
    - Cardiac tamponade
    - Metabolic acidosis

Cough

When a patient presents a cough a trainee is expected to demonstrate knowledge of the clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Common causes of acute cough
    - Viral and Pertussis type cough
    - Acute bronchitis
    - Pneumonia
    - Tuberculosis
    - Lung cancer
    - Understand the relevance of subacute and chronic cough
    - Common causes (Asthma, Upper airway, GORD)
    - When to refer for assessment of lung cancer
    - Consideration of Interstitial lung disease

Chest Pain

When a patient presents with chest pain a trainee is expected to demonstrate knowledge of the clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for common causes.

- Life threatening causes of chest pain
    - Myocardial infarction
    - Dissecting aortic aneurysm
    - Pulmonary emboli
    - Tension pneumothorax
    - Oesophageal rupture
- Clinical features of:
    - Cardiac chest pain
    - Chest pain caused by respiratory disease and oesophageal rupture
    - Chest pain caused by gastrointestinal disease
    - Chest wall pain
    - Functional chest pain

Blackout / Collapse / Dizziness

When a patient blacks out, collapses or presents with dizziness a trainee is expected to demonstrate that they know the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Stroke
    - Cerebral infarction
    - Primary intracerebral haemorrhage
    - Subarachnoid haemorrhage
- Syncope
    - Cardiac causes (arrhythmia, cardiogenic shock)
    - Vasovagal syncope
    - Postural hypotension (e.g., drugs, neurocardiac, autonomic)
    - Localised vascular disease (posterior circulation)
    - Metabolic causes (e.g., hypoglycaemia)
- Seizures and epilepsy

Management of the frail older patient in the acute setting

When a frail older patient presents a trainee is expected to demonstrate knowledge of the appropriate approach to assessment, risk factors, appropriate investigations and necessary management, including indications for urgent referral, for this population.

- Understand the broad differential diagnosis and management of complex multi-morbid illness in older patients
- Approach to investigation and management of recurrent Falls
- Non-pharmacological and pharmacological management of behavioural complications of dementia
- Investigation of causes, non-pharmacological and pharmacological management of Delirium
- Polypharmacy and inappropriate prescribing in older patients (e.g. renal dose adjustment)
- Medical management of nursing home residents- identifying aspiration risk
- Palliative care and pain management in the acute setting
- Acute stroke thrombolysis delivery and criteria for referral for intravascular intervention
- Completion of NIHSS stroke scale

Abdominal Pain

When a patient presents with abdominal pain a trainee is expected to demonstrate knowledge of the life threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Initial assessment of abdominal pain
- Differential Diagnosis:
    - Intra-abdominal
        - Gastrointestinal
        - Vascular (aneurysm, ischemia)
        - Urological
        - Gynaecological
    - Extraabdominal causes of pain
- Ability to identify and initiate management of life-threatening conditions causes of abdominal pain
- Indications for surgical consultation and urgent referral
- Identifying constipation and urinary retention in older patients

Fever

When a patient presents with fever a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Recognize the symptoms and signs of sepsis
- Identify common causes of fever
    - Infection
    - Non-infectious including PE, Drugs, vasculitis,
- Delivery of initial management of septic patient
- Knowledge of the choice of empiric and infection targeted antibiotics

Alcohol and substance dependence or withdrawal

When a patient presents with dependence or withdrawal a trainee is expected to demonstrate that they know the classifications and necessary management, including indications for referral.

- Recognition
- Psychosocial dysfunction
- Autonomic disturbances
- Stress and panic disorders
- Insomnia and sleep disturbance
- Understand the role of psychiatrist and referral to rehabilitation services

Falls and Decreased mobility

When a patient falls or presents with decreased mobility a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations, and necessary management, including indications for urgent referral, for the common causes.

- Common medical and social causes of falls in medical patients
- Complications of falls
    - Fractures including the neck of the femur
    - Intracranial injury
    - Rib fracture and pneumothorax
    - Loss of mobility and independence

Weakness and Paralysis

When a patient presents with weakness or paralysis a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Stroke/ space occupying lesion
- Spinal cord injury
- Underlying neurological causes: e.g. multiple sclerosis, Guillain-Barre syndrome
- Infections and diseases causing weakness

Headache

When a patient presents with headache a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Clinical classifications of headache
- Headache with altered neurological and focal signs
- Headache with features suggestive of raised intracranial pressure
- Headache with papilloedema
- Headache with fever
- Headache with extracranial signs
- Headache with no abnormal signs
- Drugs and toxins

Limb Pain and/or Swelling

When a patient presents with limb pain or swelling a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- As a result of injury
- As a result of an underlying medical condition
    - Undifferentiated inflammatory arthritis

Nausea and Vomiting

When a patient with nausea and vomiting a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Understanding of common causes
    - Abdominal
        - Acute Gastroenteritis
        - PUD
        - Pancreatitis
        - Acute hepatitis
        - Bowel obstruction
    - Central Causes (CNS)
    - Poisoning and Medications
- Management
    - Identification of underlying cause
    - Control of symptoms
    - Treating dehydration

Seizure

When a patient presents with seizures a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Causes
    - Unprovoked seizures/epilepsy
    - Seizures associated with metabolic, toxic and system illness
    - Cerebral hypoxia
    - Seizures associated with drugs and toxic substances
- Management
    - Emergency supportive treatment
    - Anticonvulsant treatment
    - Work up of first presentation with seizure
    - Understand driving implications for patients with seizures

Diarrhoea

When a patient presents with diarrhoea a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Classification
    - Osmotic
    - Secretary
    - Exudative
- Causes
    - Infectious
    - Inflammatory
    - Ischemic
    - Malignant
- Complications
- Management
    - Acute management
    - Knowledge of appropriate investigations
    - Recognition of associated complications
    - Role of antibiotics
    - When to refer to gastroenterology.

Delirium/Acute confusion

When a patient presents with delirium or acute confusion a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Clinical features of acute confused state- differentiating delirium, dementia, depression and psychosis
- Causes of delirium
- Use of screening instruments for delirium and/or cognitive impairment
- Clinical features of acute delirium
- Clinical features of acute functional psychosis
- Causes of confused state associated with alcohol abuse- delirium tremens, Wernicke's encephalopathy
- Drug induced/related confusion/delirium
- Bacterial meningitis, Viral encephalitis
- Subarachnoid haemorrhage/ subdural haematoma

Social issues

When a patient presents with social issues a trainee is expected to demonstrate knowledge of the appropriate approach to assessment, risk factors, appropriate investigations and necessary management, including indications for urgent referral, for this population.

- Managing medical conditions with an uncooperative patient
- Identifying potential elder abuse
- Recognising substance abuse
- Basic principles of psychiatry
- Recognising an at risk patient

Palpitations

When a patient presents with palpitations a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Anxiety
- Exercise induced
- In relation to pre-existing conditions including
    - Thyroid disease
    - Anaemia
    - Fever
    - Dehydration
    - Low blood sugar
    - Low blood pressure
- Resulting from medications or toxins
- Hormonal changes
- After prior myocardial infarct
- Coronary artery disease
- Other heart problems including congestive heart failure, heart valve or heart muscle problems

Hepatitis or Jaundice

When a patient presents with hepatitis or jaundice a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Incubation and prodromal phase
- Virus-specific
- Toxic hepatitis
- Autoimmune
- Acute liver failure

Gastrointestinal Bleeding

When a patient presents with gastrointestinal bleeding a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Understanding of the initial assessment and stabilization of patients with GI bleeding
- Understanding of haemovigilance and blood transfusion protocols
- Upper gastrointestinal bleeding including
    - Peptic ulcer Disease
    - Gastritis
    - Esophageal varices
    - Mallory-Weiss tears
    - Gastrointestinal cancers
    - Inflammation of the gastrointestinal lining from ingested material
- Lower gastrointestinal bleeding including
    - Diverticular disease
    - Gastrointestinal cancers
    - Inflammatory bowel disease (IBD)
    - Infectious diarrhoea
    - Angiodysplasia
    - Polyps
    - Haemorrhoids and anal fissures

Haemoptysis

When a patient presents with haemoptysis a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Recognition and Management of massive Haemoptysis
- Common causes of haemoptysis
    - Acute and chronic bronchitis
    - Tuberculosis
    - Lung cancer
    - Pneumonia
    - Bronchiectasis
    - Pulmonary Embolus
    - Alveolar Haemorrhage (vasculitis)

Rash

When a patient presents with a rash a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Urticaria
- Anaphylaxis and Angio Oedema
- Erythroderma and exfoliation
- Psoriasis and seborrhaoeic/contact dermatitis
- Purpura and vasculitis
- Blistering eruptions
- Infections and the skin

Acute Back Pain

When a patient presents with acute back pain a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations and necessary management, including indications for urgent referral, for the common causes.

- Non-specific acute back pain
- Causes of chronic low back pain
- Neurologic findings in back pain
- Identifying serious aetiologies of back pain e.g.,
    - Cancer
    - Fracture
    - Infection

- Cauda equina syndrome

Poisoning and Drug Overdose

When a patient presents with poisoning or overdose a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations, and necessary management, including indications for urgent referral, for the common causes.

- Diagnostic clues in the assessment of overdoses
- Identification of toxic agent (paracetamol, SSRI, benzodiazepines, opiates, amphetamines, TCAD)
- Immediate management
- Mental health assessment and definitive care

Hyper-glycaemia

When a patient presents with hyper-glycaemia a trainee is expected to demonstrate knowledge of the life-threatening causes, clinical feature, classifications, appropriate investigations, and necessary management, including indications for urgent referral, for the common causes.

- Symptoms of acute hyper-glycaemia
- Recognition and Management of diabetic ketoacidosis
- Recognition and management of Hyperosmolar non-ketotic hyperglycaemic states

Procedures

By the end of Higher Specialist Training the Trainee will be expected to develop proficiency in common procedures required for general internal medicine.

Abdominal paracentesis under ultrasound

ECG Interpretation

Emergency DC cardioversion

- Up to date ACLS training to cover:
    - Necessity of Synchronised Shock
    - Starting voltage
    - Safe use of Defibrillator

Emergency care of tracheostomy

- In cases of:
    - Cardiac arrest
    - Dealing with a compromised airway

Femoral venous lines with ultrasound guidance

- Ultrasound guided femoral venous line placement
- Anatomical markers for femoral veins
- Safe cannulation of vein
- Secure line in place/review position on X-ray

Intercostal drain under ultrasound

- Anatomical markings
- Insertion of intercostal tube (small bore seldinger)
- Connection to underwater seal and secure in place
- Assessment and management of drain
- Safe removal of the tube

Joint aspiration

- Sterile field
- Fluid analysis
- Injectable compounds

Lumbar puncture

- Anatomical markers
- Cannula selection
- Safe puncture including appropriate preparation
- Measurement of CSF pressure
- Removal of samples and interpretation of results
- Management of post lumbar puncture headache

Non-invasive Ventilation

- Principles of BIPAP and CPAP
- Monitoring and limitations
- Mask fitting
- Understanding of pressures

Pleural and ascitic fluid aspiration under ultrasound

- Safe approach and role of ultrasound guidance
- Puncture pleural / peritoneal space
- Withdrawal of fluid

General Internal Medicine Procedures Requirements Map

Trainees are expected to complete and record a minimum number of certain procedures which are essential in general internal medicine.

This table summarises the **minimum expected training per each procedure over the course of HST,** simply log the procedures on ePortfolio and complete the related DOPS Assessment as indicated:

Activity	Expected Experience & DOPS Assessments	ePortfolio form name
BIPAP/CPAP	Complete 10 procedures and 1 DOPS over the course of HST	Procedures, Skills and DOPS
Emergency DC cardioversion	Complete 10 procedures and 1 DOPS over the course of HST	
ECG interpretation	Complete 50 procedures and 1 DOPS over the course of HST	
Joint aspiration	Complete 4 procedures and 1 DOPS	
Lumbar puncture	Complete 20 procedures and 1 DOPS over the course of HST	
Abdominal paracentesis – under ultrasound	Complete 4 procedures and 1 DOPS over the course of HST (Desirable)	
Femoral venous line placement – under ultrasound	Complete 1 procedure and 1 DOPS over the course of HST (Desirable)	
Pleural aspiration – under ultrasound	Complete 4 procedures and 1 DOPS over the course of HST (Desirable)	
Intercostal drain Insertion – under ultrasound	Complete 1 procedure	

5. SPECIALTY SECTION - CLINICAL PHARMACOLOGY & THERAPEUTICS TRAINING GOALS

This section includes the Clinical Pharmacology & Therapeutics Training Goals that the Trainee should achieve by the end of the Higher Specialist Training.

Each Training Goal is broken down into specific and measurable Training Outcomes.

*Under each Outcome there is an indication of the **suggested** assessment/learning opportunities.*

In order to achieve the Outcomes, it is recommended to agree the most appropriate assessment methods with the assigned Trainer.

Training Goal 1 – Management of Patients with Complex Prescribing Needs

By the end of Clinical Pharmacology training, a Trainee is expected to demonstrate competence in the specialist management of patients with complex prescribing needs, including multimorbidity, polypharmacy, concordance issues, and medication intolerance. They should be aware of current drug regulatory frameworks and national guidance on the prescription of off-label or unlicensed medicines.

Outcome 1 – History Taking and Comprehensive Examination

The Trainee should be able to perform a detailed and focussed history and comprehensive examination of patients with complex prescribing needs, including characterisation of patient, carer and clinician priorities, assessment of adherence, medication intolerances and treatment burden.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations

Outcome 2 – Construct Appropriate Medicines Plan

The Trainee should be able to construct an appropriate medicines plan to address complex prescribing needs. The Trainee is expected to use an evidence-based and guideline approach, medicine optimisation tools, and shared decision making to align evidence with patient priorities.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations

Outcome 3 – Communication of Complex Prescribing Issues

A Trainee is expected to effectively communicate complex prescribing issues and proposed management choices to patients, carers, and healthcare providers.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Study Days

Outcome 4 – Patient Education

A Trainee is expected to provide patient education and signpost patients to reliable resources to support decision making.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Study Days

OUTCOME 5 – DRUG REGULATION AND NATIONAL GUIDANCE ON PRESCRIPTION OF OFF LABEL OR UNLICENSED MEDICINES

A Trainee is expected to understand and work with the current drug regulatory frameworks and national guidance on the prescription of off-label or unlicensed medicines. They should be able to provide appropriate information to patients and healthcare practitioners when advising on this practice.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Knowledge of Roles of the National and European Regulatory bodies including
    - The Health Products Regulatory Authority and the European Medicines Evaluation Agency (EMEA)
    - Roles of the National Centre for Pharmacoeconomics (NCPE) and other international bodies such as National Institute for Health and Clinical Excellence (NICE) and the Scottish Medicines Consortium (SMC)
- Case discussions/presentations
- Study days/conferences

Training Goal 2 – Management of Adverse Drug Reactions

By the end of Clinical Pharmacology & Therapeutics Training, the Trainee is expected to demonstrate competence in performing the clinical assessment, investigation, and management of adverse drug reactions, including medication errors at an individual and (where relevant) population level.

Outcome 1 – Define, identify, and classify adverse drug reactions

A Trainee should be able to define, identify, and classify adverse drug reactions appropriately.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Patient Safety: Medication Safety online module run by RCPI
- Performing of Audit

Outcome 2 – Investigate, manage, and report adverse drug reactions

A Trainee should be able to investigate and manage common and serious adverse drug reactions including but not limited to anaphylaxis appropriately. The Trainee is expected to report suspected adverse drug reactions appropriately and show good judgement in when to alert others.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Patient Safety: Medication Safety online module run by RCPI
- Performing of Audit

Outcome 3 – Define, identify, and classify drug errors

A Trainee should be able to define, identify, and classify drug errors appropriately.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Patient Safety: Medication Safety online module run by RCPI
- Performing of Audit

Outcome 4 – Investigate, manage, and report drug errors

A Trainee should be able to investigate, manage and report possible drug prescription or administration errors appropriately. The Trainee is expected to observe good practice to avoid errors when personally prescribing whilst demonstrating an ability to identify possible medication errors in others.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations

- Patient Safety: Medication Safety online module run by RCPI
- Performing of Audit

OUTCOME 5 – PROMOTE POLICY AND GOOD PRACTICE

A Trainee is expected to work effectively with pharmacy to promote policy and good practice to avoid drug errors, including involvement in safety and governance processes.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Management and contribution to medicines governance

Training Goal 3 – Drug Overdose and Toxicology

By the end of Clinical Pharmacology & Therapeutics Training, the Trainee is expected to demonstrate competence in performing the clinical assessment, investigation, and management of drug overdose and poisoning at an individual and (where relevant) population level.

Outcome 1 – Define, identify, and classify drug overdose and poisoning

A Trainee should be able to define, identify, and classify drug overdose and poisoning appropriately.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Patient Safety: Medication Safety online module run by RCPI
- Diploma in Toxicology
- Provide advice to local Emergency Department or poisons unit
- Attachment to National Poison Centre at Beaumont Hospital

Outcome 2 – Investigate, manage, and report on drug overdose and poisoning

A Trainee should be able to investigate and manage common and serious drug overdose and poisoning. The Trainee is expected to report suspected drug overdose appropriately and show good judgement in when to alert others. The Trainee should also demonstrate an ability to access information effectively, including via the National Poisons Information Service and keep up to date with National guidelines.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Patient Safety: Medication Safety online module run by RCPI
- Diploma in Toxicology
- Provide advice to local Emergency Department or poisons unit
- Attachment to National Poison Centre at Beaumont Hospital

Outcome 3 – assessment and management of suicide risk, mental capacity and mental health status

A Trainee should be able to conduct an initial assessment and provide management of suicide risk, mental capacity, and mental health status in poisoned patients including appropriate interaction with MDT and liaison services.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Patient Safety: Medication Safety online module run by RCPI
- Diploma in Toxicology
- Provide advice to local Emergency Department or poisons unit

- Attachment to National Poison Centre at Beaumont Hospital

Training Goal 4 – Management of Stroke

By the end of Clinical Pharmacology & Therapeutics Training, the Trainee is expected to be able to demonstrate competence in the specialist management of patients presenting acutely with stroke and TIA. This includes the delivery of thrombolysis and referral for thrombectomy as appropriate and the ongoing medical management as part of a multidisciplinary team within an organised stroke service.

Outcome 1 – Assessment of persons presenting with stroke and TIA in hyperacute phase

A Trainee should be able to demonstrate competence in the assessment of persons presenting with stroke and TIA in the hyperacute phase, including suitability for cerebral reperfusion treatments.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX, CBD, or DOPS) as indicated by Trainer
- Case discussions/presentations
- NIHSS accreditation
- RCPI Course - Acute Reperfusion Therapies in Stroke
- Thrombolysis (Record several cases as agreed with Trainer, with at least 1 DOPS over HST)
- Annual Stroke Conference
- Study Days

Outcome 2 – Investigation and ongoing management of persons following acute stroke

A Trainee should be able to demonstrate competence in the investigation and ongoing management of persons following an acute stroke.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX, or CBD) as indicated by Trainer
- Case discussions/presentations
- Annual Stroke Conference
- Study Days
- Recommended that all trainees gain experience working with dedicated stroke service

Outcome 3 – Managing and leading rehabilitation services for persons following stroke

A Trainee should be able to demonstrate competence in managing and leading rehabilitation services for persons following acute stroke.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX, or CBD) as indicated by Trainer
- Case discussions/presentations
- Rehabilitation MDT Engagement

Training Goal 5 – Pharmacokinetics, Pharmacodynamics, and Pharmacogenomics

By the end of Clinical Pharmacology & Therapeutics Training, a Trainee is expected to be able to provide analysis and expert opinion on the pharmacokinetic, pharmacodynamic and pharmacogenomic factors that guide therapeutic decisions.

Outcome 1 – Demonstrate knowledge of drug kinetics

A Trainee is expected to demonstrate knowledge of the underlying determinants of drug kinetics including absorption, distribution, metabolism, and elimination, and applies these principles to therapeutic decisions, including adjusting dosing regimens.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Research

Outcome 2 – Demonstrates knowledge of Pharmacokinetic concepts

A Trainee is expected to demonstrate knowledge of basic pharmacokinetic concepts such as Area Under the Curve (AUC), clearance and half-life and apply these principles to therapeutic decisions including choosing and adjusting dosing regimens.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Research

Outcome 3 – Uses knowledge of mechanism of action and pharmacokinetics of therapeutic drugs to guide prescribing

A Trainee to expected to select the correct drug, dose, route of administration and duration of treatment most appropriate to the individual and to groups of patients. They should be able to predict likely effects, both beneficial or adverse, of introducing novel drugs including the effect of deviation from normal dose or dosing regimens and predict the effects of combinations of drugs which can be used to guide therapeutic decisions.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Research

Outcome 4 – Make therapeutic decisions that consider individual variation

A Trainee is expected to consider individual variation including race related differences, age- and gender- related (including pregnancy and lactation), co-existing renal, hepatic, and other disease, and drug interaction (both beneficial and adverse) when making therapeutic decisions.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations

OUTCOME 5 – ORDER PHARMACOGENOMIC TESTS AND INTERPRET RESULTS

A Trainee is expected to be able to order pharmacogenomic tests and interpret results appropriately.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations

OUTCOME 6 – USES NATIONAL GUIDELINES TO PERSONALISE MEDICATION REGIMENS

A Trainee is expected to use national guidelines to personalise medication regimens for patients.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations

Training Goal 6 – Evidence Based Practice

By the end of Clinical Pharmacology & Therapeutics Training, a Trainee is expected to demonstrate knowledge and application of key research principles and provide and contribute to the evidence base across therapeutic areas of interest.

Outcome 1 – Assessment of clinical pharmacology literature

A Trainee is expected to critically evaluate literature relevant to Clinical Pharmacology including basic pharmacology, toxicology, and phase I, II, III and IV clinical trials and meta-analyses.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Case discussions/presentations
- Case Based Discussion: Evaluate expert reviews (e.g., National Medicines Information Centre (NMIC), National Centre for Pharmacoeconomics (NCPE, NICE)
- Attendance at journal clubs, drug and therapeutics and audit committee meetings
- Study Day: Evidence based medicine
- Time spent in the National Centre for Pharmacoeconomics (NCPE)

Outcome 2 – Demonstrate knowledge of statistical tests

A Trainee is expected to demonstrate knowledge of the uses and limitations of basic statistical tests as related to analysis of pharmacological data.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Case discussions/presentations
- Case Based Discussion: Evaluate expert reviews (e.g., National Medicines Information Centre (NMIC), National Centre for Pharmacoeconomics (NCPE, NICE)
- Attendance at journal clubs, drug and therapeutics and audit committee meetings.
- Annual publication
- Study Day: Evidence based medicine
- Time spent in the National Centre for Pharmacoeconomics (NCPE)

Outcome 3 – Use best available evidence to guide clinical assessment and management

A Trainee is expected to apply the best available evidence to clinically assess and manage patients with the relevant presentations and conditions.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Case discussions/presentations
- Case Based Discussion: Evaluate expert reviews (e.g., National Medicines Information Centre (NMIC), National Centre for Pharmacoeconomics (NCPE, NICE)
- Attendance at journal clubs, drug and therapeutics and audit committee meetings.
- Study Day: Evidence based medicine
- Time spent in the National Centre for Pharmacoeconomics (NCPE)

- Publication

OUTCOME 4 – SYSTEMATICALLY COLLECT, SYNTHESISE AND APPLY INFORMATION FROM SCIENTIFIC LITERATURE

A Trainee is expected to systematically collect, synthesise, and apply information from the scientific literature to develop therapeutic protocols, guidelines, and care pathways in conjunction with clinicians in the specialist area.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Case discussions/presentations
- Case Based Discussion: Evaluate expert reviews (e.g., National Medicines Information Centre (NMIC), National Centre for Pharmacoeconomics (NCPE, NICE)
- Attendance at journal clubs, drug and therapeutics and audit committee meetings.
- Study Day: Evidence based medicine
- Time spent in the National Centre for Pharmacoeconomics (NCPE)
- Publication

OUTCOME 5 – CONTRIBUTE TO EVIDENCE BASE FOR THERAPEUTIC AREAS

The Trainee is expected to contribute to the evidence base for therapeutic areas through design, delivery, analysis and dissemination of clinical research and trials.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Case discussions/presentations
- Case Based Discussion: Evaluate expert reviews (e.g., National Medicines Information Centre (NMIC), National Centre for Pharmacoeconomics (NCPE, NICE)
- Attendance at journal clubs, drug and therapeutics and audit committee meetings.
- Publications
- Study Day: Evidence based medicine
- Time spent in the National Centre for Pharmacoeconomics (NCPE)
- Guidelines, protocols, evidence summaries produced

OUTCOME 6 – SHARE EXPERTISE WITH MDT

The Trainee is expected to share expertise with the multidisciplinary team in the relevant specialist area through contribution to MDT meetings, delivering teaching and training sessions.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Case discussions/presentations
- Case Based Discussion: Evaluate expert reviews (e.g., National Medicines Information Centre (NMIC), National Centre for Pharmacoeconomics (NCPE, NICE)
- Attendance at journal clubs, drug and therapeutics and audit committee meetings.
- Annual publication
- Study Day: Evidence based medicine

- Time spent in the National Centre for Pharmacoeconomics (NCPE)

OUTCOME 7 – DELIVER AUDIT AND QUALITY IMPROVEMENT PROJECTS

The Trainee is expected to deliver audit and quality improvement projects in relation to therapeutics used or proposed.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Case discussions/presentations
- Case Based Discussion: Evaluate expert reviews (e.g., National Medicines Information Centre (NMIC), National Centre for Pharmacoeconomics (NCPE, NICE)
- Attendance at journal clubs, drug and therapeutics and audit committee meetings.
- Annual publication
- Study Day: Evidence based medicine
- Time spent in the National Centre for Pharmacoeconomics (NCPE)

Training Goal 7 - Experimental Medicine & Clinical Pharmacology & Therapeutics Research

By end of Clinical Pharmacology & Therapeutics Training, the Trainee is expected to demonstrate competence in providing expertise in the design and delivery of experimental medicine, and other types of clinical pharmacology & therapeutic research, including preclinical and clinical studies.

Outcome 1 – Describe the phases of clinical Trials

A trainee should be able to describe the phase of clinical trials, including for each phase appropriate clinical trial design, selection of participants, dosing strategy and outcome measures.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Clinical trial engagement

Outcome 2 – Design and interpret results of early phase studies

A trainee should be able describe the design and interpret the results of early phase studies to determine the pharmacokinetic and pharmacogenetic parameters that inform the design and conduct of later phase studies.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Clinical trial engagement
- Publication

Outcome 3 – Explain a range of trial designs

A trainee should be able to explain what is meant by parallel, crossover, platform, basket, umbrella, adaptive trial designs, when they are used, their advantages and limitations.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Clinical trial engagement
- Publication

Outcome 4 – Interpret results to determine bioavailability, drug metabolism and pharmacogenetics

The trainee should be able to effectively describe the design and interpret results of studies to determine the bioavailability, drug metabolism, liability to drug-drug and pharmacogenetics interactions.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (Mini-CEX or CBD) as indicated by Trainer
- Case discussions/presentations
- Clinical trial engagement

Training Goal 8 – Pharmacoeconomics and Rational Use of Medicines

By end of Clinical Pharmacology & Therapeutics Training, the Trainee is expected to demonstrate competence in the systematic appraisal of pharmacoeconomic information from a wide range of sources in relation to the efficacy, clinical effectiveness, safety, and cost of medicines to support and advise on medicines use in specific populations and wider population level.

Outcome 1 – Systematically synthesise and appraise pharmacoeconomic information

A trainee should be able to systematically collect, synthesise, appraise, and apply information from a wide range of, sometimes conflicting, sources in relation to the efficacy, clinical effectiveness, safety and cost of medicines and therapeutics to advise on medicines use at population level.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Case discussions/presentations
- Research
- Time spent in the National Centre for Pharmacoeconomics (NCPE)

Outcome 2 – Participate in decision making processes about medicines

A trainee should actively participate in decision making processes of multiprofessional committees making decisions about medicines including reviewing and presenting submissions where appropriate.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Case discussions/presentations
- Research
- Time spent in the National Centre for Pharmacoeconomics (NCPE)

Outcome 3 – Contribute to development of prescribing policies, formularies and guidelines

A trainee should be able to contribute to the development of prescribing policies, formularies and guidelines and clinical decision support systems related to medicines, including recognition of drugs likely to be high risk or high cost in routine use and suggests strategies to manage this.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Research (Development of Policies, Formularies, Guidelines)
- Time spent in the National Centre for Pharmacoeconomics (NCPE)

Outcome 4 – Assessment of cost effectiveness, safety and rational use of medicines

A trainee should be able to make an objective assessment of cost effectiveness, safety, and rational use of medicines in clinical use e.g., by audit, systematic review, retrospective research, and quality improvement projects.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Performing of Audit
- Research
- Time spent in the National Centre for Pharmacoeconomics (NCPE)

OUTCOME 5 – AWARENESS OF STRUCTURE AND FUNCTION OF MEDICINES REGULATION AGENCIES

A trainee should be able to demonstrate awareness of the structure and function of medicines regulation in Ireland and internationally, including the requirements for Marketing Authorisation of a new medicine, to inform advice on optimal medicines use at the population and individual level.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Time spent in the National Centre for Pharmacoeconomics (NCPE)

OUTCOME 6 – DESCRIBE HOW RELEVANT ORGANISATIONS MAKE EVIDENCE BASED DECISIONS

A trainee should be able to describe how NCPE, NICE and other relevant organisations select and make evidence based clinical guidance and technology appraisals about new medicines, including analysing the cost effectiveness of medicines using and interpreting standard health economic models and discussing their strengths and limitations.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Time spent in the National Centre for Pharmacoeconomics

Training Goal 9 – Delivering Effective Education in Clinical Pharmacology

By end of Clinical Pharmacology & Therapeutics Training, the Trainee is expected to be able to develop and deliver effective education and training in clinical pharmacology, therapeutics and prescribing for undergraduate students, postgraduate practitioners, and the public to promote safe and effective use of medicines across the whole healthcare workforce.

Outcome 1 – Develop and deliver training in prescribing for medical and non-medical prescribers

A trainee should be able to develop and deliver training and competency assessment in prescribing for medical and non-medical prescribers.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Delivery of training

Outcome 2 – Develop and deliver training on safe and effective use of medicines

A trainee should be able to develop and deliver effective training in multiple staff groups who are not prescribers with specific emphasis on safe and effective use of medicines.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Delivery of training

Outcome 3 – Supporting national initiatives

A trainee should be able to demonstrate evidence of supporting national initiatives around safe and effective use of medicines.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Delivery of training
- Engagement with national initiatives

Outcome 4 – public education regarding medications and their utilisation

A trainee should be able to actively contribute to public education regarding medications and their utilisation in society.

Assessment and learning opportunities

- Feedback Opportunity
- Workplace Based Assessment (CBD) as indicated by Trainer
- Delivery of training
- Engagement with national initiatives

6. APPENDICES

This section includes two appendices to the curriculum.

The first one is about Assessment (i.e. Workplace Based Assessments, and Evaluations)

The second one is about Teaching Attendance (i.e. Taught Programme, Specialty-Specific Learning Activities and Study Days)

ASSESSMENT APPENDIX

Workplace-Based Assessment and Evaluations

The expression "workplace-based assessments" (WBA) defines all the assessments used to evaluate trainees' daily clinical practices employed in their work setting. It is primarily based on the observation of trainees' performance by trainers. Each observation is followed by a trainer's feedback, with the intent of fostering reflective practice.

Relevance of Feedback for WBA

Although "assessment" is the keyword in WBA, it is necessary to acknowledge that feedback is an integral part and complementary component of WBA. The main purpose of WBA is to provide specific feedback for trainees. Such feedback is expected to be:

- **Frequent**: the opportunities to provide feedback are preferably given by directly observed practice, but also by indirectly observed activities. Feedback is expected to be frequent and should concern a low-stake event. Rather than being an assessor, the trainer is an observer who is asked to provide feedback in the context of the training opportunity presented at that moment.
- **Timely**: preferably, the feedback should be a direct conversation between trainer and trainee in a timeframe close to the training event. The trainee should then record the feedback on ePortfolio in a timely manner.
- **Constructive**: the recorded feedback would inform both trainee's practice for future performance and committees for evaluations. Hence, feedback should provide trainees with behavioural guidance on how to improve performance and give committees the context that leads to a rating, so that progression or remediation decisions can be made.
- **Actionable**: to improve performance and foster behavioural change, feedback should include practical and contextualised examples of both Trainee's strengths and areas for improvement. Based on these examples, it is necessary to outline a realistic action plan to direct the Trainee towards remediation/improvement.

Types of WBAs in use at RCPI

There is a variety of WBAs used in medical education. They can be categorised into three main groups: *Observation of performance*; *Discussion of clinical cases*; and *Feedback*.

As WBAs at RCPI we use *Observation of performance* via MiniCEX and DOPS; *Discussion of clinical cases* via CBD; *Feedback* via Feedback Opportunity.

Mandatory Evaluations are bound to specific events or times of the academic year, for these at RCPI we use: Quarterly Evaluation/End of Post Evaluation; End of Year Evaluation; Penultimate Year Evaluation; Final Year Evaluation.

Recording WBAs on ePortfolio

It is expected that WBAs are logged on an electronic portfolio. Every trainee has access to an individual ePortfolio where they must record all their assessments, including WBAs. By recording assessments on this platform, ePortfolio serves both the function to provide an individual record of the assessments and to track trainees' progression.

Formative and Summative Feedback

The Trainee can record any WBA either as formative or summative with the exception of the *Mandatory Evaluations* (Quarterly/End of Post, End of Year, Penultimate Year, Final Year evaluations).
If the WBA is logged as formative, the trainee can retain the feedback on record, but this will not be visible to an assessment panel, and it will not count towards progression. If the WBA is logged as summative it will be regularly recorded and it will be fully visible to assessment panels, counting towards progression.

WORKPLACE-BASED ASSESSMENTS	
***CBD |** Case Based Discussion*	This assessment is developed in three phases: 1. Planning: The Trainee selects two or more medical records to present to the Trainer who will choose one for the assessment. Trainee and Trainer identify one or more training goals in the curriculum and specific outcomes related to the case. Then the Trainer prepares the questions for discussion. 2. Discussion: Prevalently, based on the chosen case, the Trainer verifies the Trainee's clinical reasoning and professional judgment, determining the Trainee's diagnostic, decision-making and management skills. 3. Feedback: The Trainer provides constructive feedback to the Trainee. It is good practice to complete at least one CBD per quarter in each year of training.
***DOPS |** Direct Observation of Procedural Skills*	This assessment is specifically targeted at the evaluation of procedural skills involving patients in a single encounter. In the context of a DOPS, the Trainer evaluates the Trainee while they are performing a procedure as a part of their clinical routine. This evaluation is assessed by completing a form with pre-set criteria, then followed by direct feedback. It is good practice to complete at least one assessment per quarter in each year of training.
***MiniCEX |** Mini Clinical Evaluation Exercise*	The Trainer is required to observe and assess the interaction between the Trainee and a patient. This assessment is developed in three phases: 1. The Trainee is expected to conduct a history taking and/or a physical examination of the patient within a standard timeframe (15 minutes). 2. The Trainee is then expected to suggest a diagnosis and management plan for the patient based on the history/examination. 3. The Trainer assesses the overall Trainee's performance by using the structured ePortfolio form and provides constructive feedback. It is good practice to complete at least one assessment per quarter in each year of training.
Feedback Opportunity	Designed to record as much feedback as possible. It is based on observation of the Trainees in any clinical and/or non-clinical task. Feedback can be provided by anyone observing the Trainee (peer, other supervisors, healthcare staff, juniors). It is possible to turn the feedback into an assessment (CDB, DOPS or MiniCEX)
MANDATORY EVALUATIONS	
***QA |** Quarterly Assessment*	As the name suggests, the Quarterly Assessment recurs four times in the academic year, once every academic quarter (every three months). It frequently happens that a Quarterly Assessment coincides with the end of a post, in which case the Quarterly Assessment will be substituted by completing an End of Post Assessment. In this sense the two Assessments are interchangeable, and they can be completed using the same form on ePortfolio. However, if the Trainee will remain in the same post at the end of the quarter, it will be necessary to complete a Quarterly Assessment. Similarly, if the end of a post does not coincide with the end of a quarter, it will be necessary to complete an End of Post Assessment to assess the end of a post. This means that for every specialty and level of training, a minimum of four Quarterly Assessment and/or End of Post Assessment will be completed in an academic year as a mandatory requirement.
***EOPA |** End of Post Assessment*	
***EOYE |** End of Year Evaluation*	The End of Year Evaluation occurs once a year and involves the attendance of an evaluation panel composed of the National Specialty Directors (NSDs); the Specialty Coordinator attends too, to keep records of and facilitate the meeting. The assigned Trainer is not supposed to attend this meeting unless there is a valid reason to do so. These meetings are scheduled by the respective Specialty Coordinators and happen sometime before the end of the academic year (between April and June).
***PYE |** Penultimate Year Evaluation*	The Penultimate Year Evaluation occurs in place of the End of Year Evaluation, in the year before the last year of training. It involves the attendance of an evaluation panel composed of the National Specialty Directors (NSDs) and an External Member who is a recognised expert in the Specialty outside of Ireland; the Specialty Coordinator attends too, to keep records of and facilitate the meeting. The assigned Trainer is not supposed to attend this meeting unless there is a valid reason to do so.
***FYE |** Final Year Evaluation*	In the last year of training, the End of Year Evaluation is conventionally called Final Year Evaluation, however, its organisation is the same as an End of Year Evaluation.

TEACHING APPENDIX

RCPI Taught Programme

The RCPI Taught Programme consists of a series of modular elements spread across the years of training.

Delivery will be a combination of self-paced online material, live virtual tutorials, and in-person workshops, all accessible in one area on the RCPI's virtual learning environment (VLE), RCPI Brightspace.

The live virtual tutorials will be delivered by Tutors related to this specialty and they will use specialty-specific examples throughout each tutorial. Trainees will be assigned to a tutorial group and will remain with their tutorial group for the duration of HST.

Trainees will receive their induction content and timetable ahead of their start date on HST. Trainees must plan the time to complete their requirements and must be supported with the allocation of study leave or appropriate rostering.

As the HST Taught Programme is a mandatory component of HST, it is important that Trainees are released from service to attend the Virtual Tutorials and, where possible facilitated with the use of teaching space in the hospital.

Specialty-Specific Learning Activities (Courses & Workshops)

Trainees will also complete specialty-specific courses and/or workshops as part of the programme.

Trainees should always refer to their training curriculum for a full list of requirements for their HST programme. When not sure, Trainees should contact their Programme Coordinator.

Study Days

Study days vary from year to year, they comprise a rolling schedule of hospital-provided topic-specific educational days and national/international events selected for their relevance to the HST curriculum.

Trainees are expected to attend the majority of the study days available and **at least 80% per training year**.

Clinical Pharmacology & Therapeutics & GIM Teaching Attendance Requirements