



**FACULTY OF  
PAEDIATRICS**

ROYAL COLLEGE OF  
PHYSICIANS OF IRELAND

INTERNATIONAL CLINICAL FELLOWSHIP TRAINING IN

# PAEDIATRIC INFECTIOUS DISEASES



**This curriculum of training in ICFP in Paediatric Infectious Diseases was developed in 2015 and undergoes an annual review by Dr Paddy Gavin , National Specialty Director, and Leah O'Toole, Head of Postgraduate Training and Education, and by the ICFP in Paediatric Infectious Diseases Training Committee. The curriculum is approved by the Faculty of Paediatrics**

Version	Date Published	Last Edited By	Version Comments
6.0	12 <sup>th</sup> July 2021	Maeve O'Loughlin	Minor changes to minimum criteria

## Table of Contents

<b>INTRODUCTION .....</b>	<b>4</b>
<b>GENERIC COMPONENTS.....</b>	<b>7</b>
GOOD PROFESSIONAL PRACTICE .....	8
INFECTION CONTROL .....	10
SELF-CARE AND MAINTAINING WELL-BEING.....	12
COMMUNICATION IN CLINICAL AND PROFESSIONAL SETTING .....	14
LEADERSHIP.....	16
QUALITY IMPROVEMENT .....	18
SCHOLARSHIP.....	19
MANAGEMENT .....	20
STANDARDS OF CARE.....	22
DEALING WITH & MANAGING ACUTELY ILL PATIENTS IN APPROPRIATE SPECIALTIES.....	25
THERAPEUTICS AND SAFE PRESCRIBING .....	27
<b>SPECIALTY SECTION .....</b>	<b>29</b>
CLINICAL COMPETENCE.....	30
MANAGEMENT OF THE IMMUNOCOMPROMISED PATIENTS .....	32
VIRAL DIAGNOSTICS .....	33
ANTIRETROVIRAL THERAPY .....	34
CARE OF THE CHILD WITH PRIMARY IMMUNODEFICIENCY.....	35
MANAGEMENT OF THE HOSPITAL ACQUIRED INFECTION.....	36
MANAGEMENT OF INFECTION .....	36
ANTIMICROBIAL STEWARDSHIP.....	37
MANAGEMENT OF INFECTION PROBLEMS RELATED TO THE ICU .....	39
INFECTION CONTROL .....	40
MANAGEMENT OF COMMUNITY ACQUIRED INFECTIONS.....	41
MANAGEMENT OF CONGENITAL AND NEONATAL INFECTIONS.....	42
IMPORTED INFECTION AND TRAVEL MEDICINE.....	43
HEALTH ADVICE, RISK ASSESSMENT AND VACCINE USAGE (OPTIONAL) .....	43
VACCINOLOGY.....	44
HEALTH ADVICE, RISK ASSESSMENT AND VACCINE USAGE .....	44
IMPORTED INFECTIONS AND FEVERS INCLUDING MALARIA .....	45
DEALING WITH HIGH SECURITY RISK INFECTIONS .....	46
INFECTION AND IMMIGRANTS.....	47
INTERFACE WITH RELATED INFECTION DISCIPLINES PARTICULARLY PUBLIC HEALTH MEDICINE.....	48
LABORATORY MEDICINE.....	49
UNDERSTANDING OF PROPHYLACTIC, PRE-EMPTIVE AND THERAPEUTIC PRESCRIBING .....	50
<b>DOCUMENTATION OF MINIMUM REQUIREMENTS FOR TRAINING .....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>

## Introduction

The International Clinical Fellowship Programme (ICFP) provides a route for overseas doctors wishing to undergo structured and advanced postgraduate medical training in Ireland. The ICFP enables suitably qualified overseas postgraduate medical trainees to undertake a fixed period of active training in clinical services in Ireland. The programme is normally offered over one or two years of clinical training, after which the overseas doctors will be required to return to their country of origin. In limited certain circumstances, the period of training may extend to three years.

The purpose of the ICFP is to enable overseas trainees to gain access to structured training and in active clinical environments that they cannot get in their own country, with a view to enhancing and improving the individual's medical training and learning and, in the medium to long term, the health services in their own countries.

This Programme will allow participants to access a structured period of training and experience as developed by the Royal College of Physicians of Ireland to specifically meet the clinical needs of participants as defined by their home country's health service.

### Aims

Upon satisfactory completion of the ICFP, the doctor will be **competent** to undertake comprehensive medical practice in their chosen specialty in a **professional** manner, in keeping with the needs of the healthcare system.

**Competencies**, at a level consistent with practice in the specialty, will include the following:

- Patient care that is appropriate, effective and compassionate dealing with health problems and health promotion.
- Medical knowledge in the basic biomedical, behavioural and clinical sciences, medical ethics and medical jurisprudence and application of such knowledge in patient care.
- Interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professionals, the scientific community and the public.
- Appraisal and utilisation of new scientific knowledge to update and continuously improve clinical practice.
- Capability to be a scholar, contributing to development and research in the field of the chosen specialty.
- Professionalism.
- Ability to understand health care and identify and carry out system-based improvement of care.

### Professionalism

Medical professionalism is a core element of being a good doctor. Good medical practice is based on a relationship of trust between profession and society, in which doctors are expected to meet the highest standards of professional practice and behaviour. It involves partnership between patient and doctor that is based on mutual respect, confidentiality, honesty, responsibility and accountability. In addition to maintaining clinical competence, a doctor should also:

- Show integrity, compassion and concern for others in day-to-day practice
- Develop and maintain a sensitive and understanding attitude with patients
- Exercise good judgement and communicate sound clinical advice to patients
- Search for the best evidence to guide professional practice
- Be committed to continuous improvement and excellence in the provision of health care whether working alone or as part of a team

Prior to commencing their sponsored clinical placements, all participants will also be required to undergo the mandatory screening requirements of the relevant clinical site/service including occupational health assessment and Garda/Police clearance.

## Training Programme Duration & Organisation of Training

The period of clinical training that will be provided under the International Clinical Fellowship Programme (ICFP) is usually 2 years. In certain circumstances, the period of training may extend to three years (MRCPI/UK required).

- Each ICFP is developed by the Royal College of Physicians of Ireland will be specifically designed so as to meet the training needs of participants to support the health service in their home country.
- All appointees to the ICFP will be assessed by the Royal College of Physicians of Ireland to ensure that they possess the necessary requirements from a training and clinical service perspective.
- Each overseas doctor participating in the ICFP will be enrolled with the Royal College of Physicians of Ireland and will be under the supervision of a consultant doctor who is registered on the Specialist Division of the Register of Medical Practitioners maintained by the Medical Council and who is an approved consultant trainer.
- Appointees to the ICFP will normally be registered on the Supervised Division of the Register of Medical Practitioners maintained by the Medical Council in Ireland.
- Appointees will agree a training plan with their trainers at the beginning of each training year.
- For the duration of their International Medical Graduate (IMG) programme and associated clinical placements, all participants will remain directly employed and directly paid by their sponsoring state at a rate appropriate to their training level in Ireland and benchmarked against the salary scales applicable to NCHD's in Ireland;
- Successful completion of an ICFP will result in the participant being issued with a formal Certificate of completion for the Fellowship Programme by the Royal College of Physicians of Ireland. This Certificate will enable the participant's parent training body in their sponsoring home country to formally recognise and accredit their time spent training in Ireland.

The training programme offered will provide opportunities to fulfil all the requirements of the curriculum of training. There will be posts in both general hospitals and teaching hospitals. Each post within the programme will have a named trainer/educational supervisor and programmes will be under the direction of the National Specialist Director for the relevant medical speciality to be confirmed by the College. Programmes will be as flexible as possible consistent with curricular requirements, for example to allow the trainee to develop their sub-specialty interest.

### ePortfolio logbook

Each trainee is responsible for maintaining an up-to-date record of progress through training and compiling a portfolio of achievements for presentation at each annual assessment review. The trainee also has a duty to maximise opportunities to learn, supplementing the training offered with additional self-directed learning in order to fulfil all the educational goals of the curriculum.

Up-to-date training records and an ePortfolio of achievements will be maintained by the trainee throughout. The training records will be countersigned as appropriate by the trainers to confirm the satisfactory fulfilment of the required training experience and the acquisition of the competencies set out in the training plan. They will remain the property of the trainee and must be produced at their annual assessment review.

Trainees must co-operate with the College in completing their training plan.

It is in a trainee's own interest to maintain contact with the Royal College of Physicians of Ireland, and to respond promptly to all correspondence relating to training. At review, your ePortfolio will be examined.

**Review**

A consultant trainer/educational supervisor will be identified for each participant in the programme. He/she will be responsible for ensuring that the educational potential of the post is translated into effective training which is being fully utilized. Only departments approved for Training by the Royal College of Physicians of Ireland and its constituent training bodies will be used.

The training objectives to be secured should be agreed between each trainee and trainer at the commencement of each posting in the form of a written training plan. The trainer will be available throughout, as necessary, to supervise the training process. In each year trainees undergo a formal review by an appropriate panel. The panel will review in detail the training record, will explore with the trainee the range of experience and depth of understanding which has been achieved and consider individual trainer's reports. An opportunity is also given to the trainee to comment on the training being provided; identifying in confidence any deficiencies in relation to a particular post.

A quarterly and annual review of progress through training will be undertaken on behalf of the International Clinical Fellowship Programme (ICFP). These will include assessments and reports by educational supervisors, confirmation of achievements and the contents of the ePortfolio will be reviewed. At some or all of these annual reviews a non-specialty assessor will be present capable of addressing core competencies.

The award of a Certificate of completion will be determined by a satisfactory outcome after completion of the entire series of assessments.

## **Generic Components**

**This chapter covers the generic components which are relevant to HST trainees within the Faculty of Paediatrics but with varying degrees of relevance and appropriateness, depending on the specialty.**

**As such, this chapter needs to be viewed as an appropriate guide of the level of knowledge and skills required from all HST trainees with differing application levels in practice.**

## Good Professional Practice

**Objective:** Trainees must appreciate that medical professionalism is a core element of being a good doctor and that good medical practice is based on a relationship of trust between the profession and society, in which doctors are expected to meet the highest standards of professional practice and behaviour.

**Medical Council Domains of Good Professional Practice:** Relating to Patients, Communication and Interpersonal Skills, Professionalism, Patient Safety and Quality of Patient Care.

### KNOWLEDGE

#### Effective Communication

- How to listen to patients and colleagues
- The principles of open disclosure
- Knowledge and understanding of valid consent
- Teamwork
- Continuity of care

#### Ethics

- Respect for autonomy and shared decision making
- How to enable children and their family to make their own decisions about their health care
- How to place the patient at the centre of care
- How to protect and properly use sensitive and private patient information in accordance with data protection legislation and how to maintain confidentiality
- The judicious sharing of information with other healthcare professionals where necessary for care following Medical Council Guidelines
- Maintaining competence and assuring quality of medical practice
- How to work within ethical and legal guideline when providing clinical care, carrying research and dealing with end of life issues

#### Honesty, openness and transparency (mistakes and near misses)

- Preventing and managing near misses and adverse events.
- When and how to report a near miss or adverse event
- Incident reporting; root cause and system analysis
- Understanding and learning from errors
- Understanding and managing clinical risk
- Managing complaints
- Following open disclosure practices
- Knowledge of national policy and National Guidelines on Open Disclosure

#### Raising concerns about patient safety

- Safe working practice, role of procedures and protocols in optimal practice
- The importance of standardising practice through the use of checklists, and being vigilant
- Safe healthcare systems and provision of a safe working environment
- Awareness of the multiple factors involved in failures
- Knowledge and understanding of Reason's Swiss cheese model
- Understanding how and why systems break down and why errors are made
- Health care errors and system failures
- Human and economic costs in system failures
- The important of informing a person of authority of systems or service structures that may lead to unsafe practices which may put patients, yourself or other colleagues at risk
- Awareness of the Irish Medical Councils policy on raising concerns about safety in the environment in which you work



**SKILLS**

- Effective communication with patients, parents, guardians and colleagues
- Co-operation and collaboration with colleagues to achieve safe and effective quality patient care
- Being an effective team player
- Ethical and legal decision making skills
- Minimising errors during invasive procedures by developing and adhering to best-practice guidelines for safe surgery
- Minimising medication errors by practicing safe prescribing principles
- Ability to learn from errors and near misses to prevent future errors
- Managing errors and near-misses
- Using relevant information from complaints, incident reports, litigation and quality improvement reports in order to control risks
- Managing complaints
- Using the Open Disclosure Process Algorithm

**ASSESSMENT & LEARNING METHODS**

- Consultant feedback at annual assessment
- Workplace based assessment e.g. Mini-CEX, DOPS, CBD
- Educational supervisor's reports on observed performance (in the workplace): prioritisation of patient safety in practice
- RCPI HST Leadership in Clinical Practice
- RCPI Ethics programmes
- Medical Council Guide to Professional Conduct and Ethics
- Reflective learning around ethical dilemmas encountered in clinical practice
- Quality improvement methodology course - recommended

## Infection Control

**Objective:** To be able to appropriately manage infections and risk factors for infection at an institutional level, including the prevention of cross-infections and hospital acquired infection

**Medical Council Domains of Good Professional Practice:** Patient Safety and Quality of Patient Care; Management (including Self-Management).

### KNOWLEDGE

#### Within a consultation

- The principles of infection control as defined by the HIQA
- How to minimise the risk of cross-infection during a patient encounter by adhering to best practice guidelines available, including the 5 Moments for Hand Hygiene guidelines
- The principles of preventing infection in high risk groups e.g. managing antibiotic use to prevent *Clostridium difficile*
- Knowledge and understanding of the local antibiotic prescribing policy
- Awareness of infections of concern, e.g. MRSA, *Clostridium difficile*
- Best practice in isolation precautions
- When and how to notify relevant authorities in the case of notifiable infectious disease
- Understanding the increased risk of infection to patients in surgery or during an invasive procedure and adhering to guidelines for minimising infection in such cases
- The guidelines for needle-stick injury prevention and management

#### During an outbreak

- Guidelines for minimising infection in the wider community in cases of communicable diseases and how to seek expert opinion or guidance from infection control specialists where necessary
- Hospital policy/seeking guidance from occupational health professional regarding the need to stay off work/restrict duties when experiencing infections the onward transmission of which might impact on the health of others

### SKILLS

- Practicing aseptic techniques and hand hygiene
- Following local and national guidelines for infection control and management
- Prescribing antibiotics according to antibiotic guidelines
- Encouraging staff, patients and relatives to observe infection control principles
- Communicating effectively with patients regarding treatment and measures recommended to prevent re-infection or spread
- Collaborating with infection control colleagues to manage more complex or uncommon types of infection including those requiring isolation e.g. transplant cases, immunocompromised host
- In the case of infectious diseases requiring disclosure:
  - Working knowledge of those infections requiring notification
  - Undertaking notification promptly
  - Collaborating with external agencies regarding reporting, investigating and management of notifiable diseases
  - Enlisting / requiring patients' involvement in solving their health problems, providing information and education
  - Utilising and valuing contributions of health education and disease prevention and infection control to health in a community

**ASSESSMENT & LEARNING METHODS**

- Consultant feedback at annual assessment
- Workplace based assessment e.g. Mini-CEX, DOPS, CBD
- Educational supervisor's reports on observed performance (in the workplace): practicing aseptic techniques as appropriate to the case and setting, investigating and managing infection, prescribing antibiotics according to guidelines
- Completion of infection control induction in the workplace
- Personal Protective Equipment Training Course (In hospital)

## Self-Care and Maintaining Well-Being

### Objectives:

1. To ensure that trainees understand how their personal histories and current personal lives, as well as their values, attitudes, and biases affect their care of patients so that they can use their emotional responses in patient care to their patients' benefit
2. To ensure that trainees care for themselves physically and emotionally, and seek opportunities for enhancing their self-awareness and personal growth

**Medical Council Domains of Good Professional Practice:** Patient Safety and Quality of Patient Care, Relating to Patients, Communication and Interpersonal Skills, Collaboration and Teamwork, Management (including self-management).

### KNOWLEDGE

- Self-awareness including preferences and biases
- Personal psychological strengths and limitations
- Understand how personality characteristics, such as need for approval, judgemental tendencies, needs for perfection and control etc., affect relationships with patients and others
- Knowledge of core beliefs, ideals, and personal philosophies of life, and how these relate to own goals in medicine
- Know how family-of-origin, race, class, religion and gender issues have shaped own attitudes and abilities to discuss these issues with patients
- Understand the difference between feelings of sympathy and feelings of empathy
- Know the factors between a doctor and patient that enhance or interfere with abilities to experience and convey empathy
- Understanding of own attitudes toward uncertainty and risk taking and own need for reassurance
- How own relationships with certain patients can reflect attitudes toward paternalism, autonomy, benevolence, non-maleficence and justice
- Recognise own feelings in straightforward and complex patient-doctor interactions
- Recognising the symptoms of stress and burn out

### SKILLS

- Exhibiting empathy and showing consideration for all patients, their impairments and attitudes irrespective of cultural and other differences
- Ability to create boundaries with patients that allow for therapeutic alliance
- Challenge authority appropriately from a firm sense of own values and integrity and respond appropriately to situations that involve abuse, unethical behaviour and coercion
- Recognise own limits and seek appropriate support and consultation
- Work collaboratively and effectively with colleagues and other members of health care teams
- Manage effectively commitments to work and personal lives, taking the time to nurture important relationship and oneself
- Ability to recognise when falling behind and adjusting accordingly
- Demonstrating the ability to cope with changing circumstances, variable demand, being prepared to re-prioritise and ask for help
- Utilising a non-judgemental approach to patient's problem
- Recognise the warning signs of emotional ill-health in self and others and be able to ask for appropriate help
- Commitment to lifelong process of developing and fostering self-awareness, personal growth and well being
- Be open to receiving feedback from others as to how attitudes and behaviours are affecting their care of patients and their interactions with others
- Holding realistic expectations of own and of others' performance, time-conscious, punctual
- Valuing the breadth and depth of experience that can be accessed by associating with professional colleagues

## **ASSESSMENT & LEARNING METHODS**

- On-going supervision
- RCPI Ethics programmes
- Wellness Matters Course (Mandatory)
- RCPI HST Leadership in Clinical Practice course

## Communication in Clinical and Professional Setting

**Objective:** To demonstrate the ability to communicate effectively and sensitively with patients, their relatives, carers and with professional colleagues in different situations.

**Medical Council Domains of Good Professional Practice:** Relating to Patients; Communication and Interpersonal Skills.

### KNOWLEDGE

#### Within a consultation

- How to effectively listen and attend to patients, parents and guardians
- How to structure an interview to obtain/convey information; identify concerns, expectations and priorities; promote understanding, reach conclusions and use age appropriate language.
- How to empower the patient, and/or parent, and encourage self-management

#### Difficult circumstances

- Understanding of potential areas for difficulty and awkward situations
- How to negotiate cultural, language barriers, dealing with sensory or psychological and/or intellectual impairments and how to deal with challenging or aggressive behaviour
- Knowing how and when to break bad news
- How to communicate essential information where difficulties exist, how to appropriately utilise the assistance of interpreters, chaperones, and relatives.
- How to deal with anger and frustration in self and others
- Selecting appropriate environment; seeking assistance, making and taking time

#### Dealing with professional colleagues and others

- How to communicate with doctors and other members of the healthcare team
- How to provide a concise, written, verbal, or electronic, problem-orientated statement of facts and opinions
- The legal context of status of records and reports, of data protection confidentiality
- Freedom of Information (FOI) issues
- Understanding of the importance of legible, accessible, records to continuity of care
- Knowing when urgent contact becomes necessary and the appropriate place for verbal, telephone, electronic, or written communication
- Recognition of roles and skills of other health professionals
- Awareness of own abilities/limitations and when to seek help or give assistance, advice to others; when to delegate responsibility and when to refer

#### Maintaining continuity of care

- Understanding the relevance of continuity of care to outcome, within and between phases of healthcare management
- The importance of completion of tasks and documentation, e.g. before handover to another team, department, specialty, including identifying outstanding issues and uncertainties
- Knowledge of the required attitudes, skills and behaviours which facilitate continuity of care including, being available and contactable, alerting others to avoid potential confusion or misunderstanding through communications failure

**Giving explanations**

- The importance of possessing the facts, and of recognising uncertainty and conflicting evidence on which decisions have to be based
- How to secure and retain attention avoiding distraction
- Understanding how children and their guardians receive information best, the relative value of the spoken, written, visual means of communication, use of reinforcement to assist retention
- Knowledge of the risks of information overload
- Tailoring the communication of information to the level of understanding of the recipient
- Strategies to achieve the level of understanding necessary to gain co-operation and partnership; compliance, informed choice, acceptance of opinion, advice, recommendation

**Responding to complaints**

- Value of hearing and dealing with complaints promptly; the appropriate level, the procedures (departmental and institutional); sources of advice, and assistance available
- The importance of obtaining and recording accurate and full information, seeking confirmation from multiple sources
- Knowledge of how to establish facts, identify issues and respond quickly and appropriately to a complaint received

**SKILLS**

- Ability to appropriately elicit facts, using a mix of open and closed-ended questions
- Using “active listening” techniques such as nodding and eye contact
- Giving information clearly, avoiding jargon, confirming understanding, ability to encourage co-operation, compliance; obtaining informed consent
- Showing consideration and respect for other’s culture, opinions, patient’s right to be informed and make choices
- Respecting another’s right to opinions and to accept or reject advice
- Valuing perspectives of others contributing to management decisions
- Conflict resolution
- Dealing with complaints
- Communicating decisions in a clear and thoughtful manner
- Presentation skills
- Maintaining (legible) records
- Being available, contactable, time-conscious
- Setting realistic objectives, identifying and prioritising outstanding problems
- Using language, literature (e.g. leaflets) diagrams, educational aids and resources appropriately
- Establish facts, identify issues and respond quickly and appropriately to a complaint received
- Accepting responsibility, involving others, and consulting appropriately
- Obtaining informed consent
- Discussing informed consent
- Giving and receiving feedback

**ASSESSMENT & LEARNING METHODS**

- Mastering Communication course (Year 1)
- Consultant feedback at annual assessment
  - Workplace based assessment e.g. Mini-CEX, DOPS, CBD
  - Educational supervisor’s reports on observed performance (in the workplace): communication with others e.g. at handover. ward rounds, multidisciplinary team members
- Presentations
- RCPI Ethics programmes
- RCPI HST Leadership in Clinical Practice Course

## Leadership

**Objective:** To have the knowledge, skills and attitudes to act in a leadership role and work with colleagues to plan, deliver and develop services for improved patient care and service delivery.

**Medical Council Domains of Good Professional Practice:** Patient Safety and Quality of Patient Care; Communication and Interpersonal Skill; Collaboration and Teamwork; Management (including Self-Management); Scholarship.

### KNOWLEDGE

#### Personal qualities of leaders

- Knowledge of what leadership is in the context of the healthcare system appropriate to training level
- The importance of good communication in teams and the role of human interactions on effectiveness and patient safety

#### Working with others

- Awareness of own personal style and other styles and their impact on team performance
- The importance of good communication in teams and the role of human interactions on effectiveness and patient safety

#### Managing services

- The structure and function of Irish health care system
- Awareness of the challenges of managing in healthcare
  - Role of governance
  - Clinical directors
- Knowledge of planning and design of services
- Knowledge and understanding of the financing of the health service
  - Knowledge of how to prepare a budget
  - Defining value
  - Managing resources
- Knowledge and understanding of the importance of human factors in service delivery
  - How to manage staff training, development and education
- Managing performance
  - How to perform staff appraisal and deal effectively with poor staff performance
  - How to rewards and incentivise staff for quality and efficiency

#### Setting direction

- The external and internal drivers setting the context for change
- Knowledge of systems and resource management that guide service development
- How to make decisions using evidence-based medicine and performance measures
- How to evaluate the impact of change on health outcomes through ongoing service evaluation



**SKILLS**

- Effective communication with patients, families and colleagues
- Co-operation and collaboration with others; patients, service users, carers colleagues within and across systems
- Being an effective team player
- Ability to manage resources and people
- Managing performance and performance indicators

**Demonstrating personal qualities**

- Efficiently and effectively managing one-self and one's time especially when faced with challenging situations
- Continues personal and professional development through scholarship and further training and education where appropriate
- Acting with integrity and honesty with all people at all times
- Developing networks to expand knowledge and sphere of influence
- Building and maintaining key relationships
- Adapting style to work with different people and different situations
- Contributing to the planning and design of services

**ASSESSMENT & LEARNING METHODS**

- Mastering Communication course (Year 1)
- RCPI HST Leadership in Clinical Practice (Year 3 – 5)
- Consultant feedback at annual assessment
- Workplace based assessment e.g. Mini-CEX, DOPS, CBD
- Educational supervisor's reports on observed performance (in the workplace): on management and leadership skills
- Involvement in hospital committees where possible e.g. Division of Medicine, Drugs and Therapeutics, Infection Control etc.

## Quality Improvement

**Objective:** To demonstrate the ability to identify areas for improvement and implement basic quality improvement skills and knowledge to improve patient safety and quality in the healthcare system.

**Medical Council Domains of Good Professional Practice:** Patient Safety and Quality of Patient Care; Communication and Interpersonal Skills; Collaboration and Teamwork; Management; Relating to Patients; Professionalism

### KNOWLEDGE

#### Personal qualities of leaders

- The importance of prioritising the patient and patient safety in all clinical activities and interactions

#### Managing services

- Knowledge of systems design and the role of microsystems
- Understanding of human factors and culture on patient safety and quality

#### Improving services

- How to ensure patient safety by adopting and incorporating a patient safety culture
- How to critically evaluate where services can be improved by measuring performance, and acting to improve quality standards where possible
- How to encourage a culture of improvement and innovation

#### Setting direction

- How to create a 'burning platform' and motivate other healthcare professionals to work together within quality improvement
- Knowledge of the wider healthcare system direction and how that may impact local organisations

### SKILLS

- Improvement approach to all problems or issues
- Engaging colleagues, patients and the wider system to identify issues and implement improvements
- Use of quality improvement methodologies, tools and techniques within every day practice
- Ensuring patient safety by adopting and incorporating a patient safety culture
- Critically evaluating where services can be improved by measuring performance, and acting to raise standards where possible
- Encouraging a culture of improvement and innovation

#### Demonstrating personal qualities

- Encouraging contributions and involvement from others including patients, carers, members of the multidisciplinary team and the wider community
- Considering process and system design, contributing to the planning and design of services

### ASSESSMENT & LEARNING METHODS

- RCPI HST Leadership in Clinical Practice
- Consultant feedback at annual assessment
- Involvement in hospital committees where possible e.g. Division of Medicine, Drugs and Therapeutics, Infection Control etc.

## Scholarship

**Objective:** To develop skills in personal/professional development, teaching, educational supervision and research

**Medical Council Domains of Good Professional Practice:** Scholarship

### KNOWLEDGE

#### Teaching, educational supervision and assessment

- Principles of adult learning, teaching and learning methods available and strategies
- Educational principles directing assessment methods including, formative vs. summative methods
- The value of regular appraisal / assessment in informing training process
- How to set effective educational objectives and map benefits to learner
- Design and delivery of an effective teaching event, both small and large group
- Use of appropriate technology / materials

#### Research, methodology and critical evaluation

- Designing and resourcing a research project
- Research methodology, valid statistical analysis, writing and publishing papers
- Ethical considerations and obtaining ethical approval
- Reviewing literature, framing questions, designing a project capable of providing an answer
- How to write results and conclusions, writing and/or presenting a paper
- How to present data in a clear, honest and critical fashion

#### Audit

- Basis for developing evidence-based medicine, kinds of evidence, evaluation; methodologies of clinical trials
- Sources from which useful data for audit can be obtained, the methods of collection, handling data, the audit cycle
- Means of determining best practice, preparing protocols, guidelines, evaluating their performance
- The importance of re-audit

### SKILLS

- Bed-side undergraduate and post graduate teaching
- Developing and delivering lectures
- Carrying out research in an ethical and professional manner
- Performing an audit
- Presentation and writing skills – remaining impartial and objective
- Adequate preparation, timekeeping
- Using technology / materials

### ASSESSMENT & LEARNING METHODS

- Health Research (online) – An Introduction
- Effective Teaching and Supervising Skills course (online) - recommended
- Educational Assessment Skills course - recommended
- Performing audit (online) course –mandatory
- Health Research Methods for Clinicians - recommended

## Management

**Objective:** To understand the organisation, regulation and structures of the health services, nationally and locally, and to be competent in the use and management of information on health and health services, to develop personal effectiveness and the skills applicable to the management of staff and activities within a healthcare team.

**Medical Council Domains of Good Professional Practice:** Management.

### KNOWLEDGE

#### Health service structure, management and organisation

- The administrative structure of the Irish Health Service, services provided in Ireland and their funding and how to engage with these for best results
- Department of Health, HSE and hospital management structures and systems
- The national regulatory bodies, health agencies and patient representative groups
- Understanding the need for business plans, annual hospital budgets, the relationship between the hospital and PCCC

#### The provision and use of information in order to regulate and improve service provision

- Methods of collecting, analysing and presenting information relevant to the health of a population and the apportionment of healthcare resources
- The common ways in which data is presented, knowing of the sources which can provide information relevant to national or to local services and publications available

#### Maintaining medical knowledge with a view to delivering effective clinical care

- Understanding the contribution that current, accurate knowledge can make to establishing clinical effectiveness, best practice and treatment protocols
- Knowledge of sources providing updates, literature reviews and digests

#### Delegation skills, empowerment and conflict management

- How to assess and develop personal effectiveness, improve negotiating, influencing and leadership skills
- How to manage time efficiently, deal with pressure and stress
- How to motivate others and operate within a multidisciplinary team

### SKILLS

- Chairing, organising and participating in effective meetings
- Managing risks
- Managing time
- Delegating tasks effectively
- Managing conflicts
- Exploring, directing and pursuing a project, negotiating through the relevant departments at an appropriate level
- Ability to achieve results through an understanding of the organisation and its operation
- Ability to seek / locate information in order to define an issue needing attention e.g. to provide data relevant to a proposal for change, establishing a priority, obtaining resources
- Ability to make use of information, use IT, undertake searches and obtain aggregated data, to critically evaluate proposals for change e.g. innovative treatments, new technologies
- Ability to adjust to change, apply management, negotiating skills to manage change
- Appropriately using management techniques and seeking to improve these skills and personal effectiveness

### **ASSESSMENT & LEARNING METHODS**

- Mastering Communication course
- Performing Audit online course
- RCPI HST Leadership in Clinical Practice
- Annual audit
- Consultant feedback on management and leadership skills
- Involvement in hospital committees

## Standards of Care

**Objective:** To be able to consistently and effectively assess and treat patients' problems

**Medical Council Domains of Good Professional Practice:** Patient Safety and Quality of Patient Care; Relating to Patients; Communication and Interpersonal Skills; Collaboration and Teamwork: Management (including Self-Management); Clinical Skills.

### KNOWLEDGE

#### Diagnosing Patients

- How to carry out appropriate history taking
- How to appropriately examine a patient
- How to make a differential diagnosis

#### Investigation, indications, risks, cost-effectiveness

- The pathophysiological basis of the investigation
- Understand the clinical significance of reference ranges, positive and negative predictive value and potential risks of inappropriate tests
- The procedures for commonly used investigations, common or/and serious risks
- Understanding of the sensitivity and specificity of results, artefacts, PPV and NPV
- Understanding significance, interpreting and explaining results of investigations
- Logical approach in choosing, sequencing and prioritising investigations

#### Treatment and management of disease

- Natural history of diseases
- Quality of life concepts
- How to accurately assess patient's needs, prescribe, arrange treatment, recognise and deal with reactions / side effects
- How to set realistic therapeutic goals, to utilise rehabilitation services, and use palliative care approach appropriately
- Recognising that illness (especially chronic and/or incapacity) has an impact on relationships and family, having financial as well as social effects

#### Disease prevention and health education

- Screening for disease: methods, advantages and limitations
- Health promotion and support agencies; means of providing sources of information for patients
- Risk factors, preventive measures, and change strategies applicable to smoking, alcohol, drug abuse, and lifestyle
- Disease notification; methods of collection and sources of data

#### Notes, records, correspondence

- Functions of medical records, their value as an accurate up-to-date commentary and source of data
- An understanding of the need and appropriate use of problem-orientated discharge notes, letters, more detailed case reports, concise out-patient reports and focused reviews
- Appreciating the importance of up-to-date, easily available, accurate information, and the need for communicating promptly e.g. with primary care

#### Prioritising, resourcing and decision taking

- How to prioritise demands, respond to patients' needs and sequence urgent tasks
- Establishing (clinical) priorities e.g. for investigations, intervention; how to set realistic goals; understanding the need to allocate sufficient time, knowing when to seek help
- Understanding the need to complete tasks, reach a conclusion, make a decision, and take action within allocated time
- Knowing how and when to conclude

**Handover**

- Know what are the essential requirements to run an effective handover meeting
  - Sufficient and accurate patients information
  - Adequate time
  - Clear roles and leadership
  - Adequate IT
- Know how to prioritise patient safety
  - Identify most clinically unstable patients
  - Use ISBAR (Identify, Situation, Background, Assessment, Recommendations)
  - Proper identification of tasks and follow-ups required
  - Contingency plans in place
- Know how to focus the team on actions
  - Tasks are prioritised
  - Plans for further care are put in place
  - Unstable patients are reviewed

**Relevance of professional bodies**

- Understanding the relevance to practice of standards of care set down by recognised professional bodies – the Medical Council, Medical Colleges and their Faculties, and the additional support available from professional organisations e.g. IMO, Medical Defence Organisations and from the various specialist and learned societies

**SKILLS**

- Taking and analysing a clinical history and performing a reliable and appropriate examination, arriving at a diagnosis and a differential diagnosis
- Liaising, discussing and negotiating effectively with those undertaking the investigation
- Selecting investigations carefully and appropriately, considering (patients') needs, risks, value and cost effectiveness
- Appropriately selecting treatment and management of disease
- Discussing, planning and delivering care appropriate to patient's needs and wishes
- Preventing disease using the appropriate channels and providing appropriate health education and promotion
- Collating evidence, summarising, recognising when objective has been met
- Screening
- Working effectively with others including
  - Effective listening
  - Ability to articulate and deliver instructions
  - Encourage questions and openness
  - Leadership skills
- Ability to prioritise
- Ability to delegate effectively
- Ability to advise on and promote lifestyle change, stopping smoking, control of alcohol intake, exercise and nutrition
- Ability to assess and explain risk, encourage positive behaviours e.g. immunisation and preventive measures
- Involve patients' in solving their health problems, by providing information and education
- Availing of support provided by voluntary agencies and patient support groups, as well as expert services e.g. detoxification / psychiatric services
- Act in accordance with, up to date standards on palliative care needs assessment
- Valuing contributions of health education and disease prevention to health in a community
- Compile accurate and appropriate detailed medical notes and care reports including the results of examinations, investigations, procedures performed, sufficient to provide an accurate, detailed account of the diagnostic and management process and outcome, providing concise, informative progress reports (both written and oral)
- Transfer information in an appropriate and timely manner

- Maintaining legible records in line with the Guide to Professional Conduct and Ethics for Registered Medical Practitioners in Ireland
- Actively engaging with professional/representative/specialist bodies

#### **ASSESSMENT & LEARNING METHODS**

- Consultant feedback
- Workplace based assessment e.g. Mini-CEX, DOPS, CBD
- Educational supervisor's reports on observed performance (in the workplace)
- Audit
- Medical Council Guide to Professional Conduct and Ethics



## Dealing with & Managing Acutely Ill Patients in Appropriate Specialties

**Objectives:** To be able to assess and initiate management of patients presenting as emergencies, and to appropriately communicate the diagnosis and prognosis. Trainees should be able to recognise the critically ill and immediately assess and resuscitate if necessary, formulate a differential diagnosis, treat and/or refer as appropriate, elect relevant investigations and accurately interpret reports.

**Medical Council Domains of Good Professional Practice:** Patient Safety and Quality of Patient Care, Clinical Skills.

### KNOWLEDGE

#### Management of acutely ill patients with medical problems

- Presentation of potentially life-threatening problems
- Indications for urgent intervention, the additional information necessary to support action (e.g. results of investigations) and treatment protocols
- When to seek help, refer/transfer to another specialty
- APLS protocols
- Ethical and legal principles relevant to resuscitation and DNAR in line with National Consent Policy
- How to manage acute medical intake, receive and refer patients appropriately, interact efficiently and effectively with other members of the medical team, accept/undertake responsibility appropriately
- Management of overdose
- How to anticipate / recognise, assess and manage life-threatening emergencies, recognise significantly abnormal physiology e.g. dysrhythmia and provide the means to correct e.g. defibrillation
- How to convey essential information quickly to relevant personnel: maintaining legible up-to-date records documenting results of investigations, making lists of problems dealt with or remaining, identifying areas of uncertainty; ensuring safe handover

#### Managing the deteriorating patient

- How to categorise a patients' severity of illness using Early Warning Scores (EWS) guidelines
- How to perform an early detection of patient deterioration
- How to use a structured communication tool (ISBAR)
- How to promote an early medical review, prompted by specific trigger points
- How to use a definitive escalation plan

#### Discharge planning

- Knowledge of patient pathways
- How to distinguish between illness and disease, disability and dependency
- Understanding the potential impact of illness and impairment on activities of daily living, family relationships, status, independence, awareness of quality of life issues
- Role and skills of other members of the healthcare team, how to devise and deliver a care package
- The support available from other agencies e.g. specialist nurses, social workers, community care
- Principles of shared care with the general practitioner service
- Awareness of the pressures/dynamics within a family, the economic factors delaying discharge but recognise the limit to benefit derived from in-patient care

**SKILLS**

- BLS/APLS
- Dealing with common medical emergencies
- Interpreting blood results, ECG/Rhythm strips, chest X-Ray, CT brain
- Giving clear instructions to both medical and hospital staff
- Ordering relevant follow up investigations
- Discharge planning, including complex discharge
- Knowledge of HIPE (Hospital In-Patient Enquiry)
- Multidisciplinary team working
- Communication skills
- Delivering early, regular and on-going consultation with family members (with the patient's permission) and primary care physicians
- Remaining calm, delegating appropriately, ensuring good communication
- Attempting to meet patients'/ relatives' needs and concerns, respecting their views and right to be informed in accordance with Medical Council Guidelines
- Establishing liaison with family and community care, primary care, communicate / report to agencies involved
- Demonstrating awareness of the wide ranging effects of illness and the need to bridge the gap between hospital and home
- Categorising a patients' severity of illness
- Performing an early detection of patient deterioration
- Use of structured communication tools (e.g. ISBAR)

**ASSESSMENT & LEARNING METHODS**

- APLS course
- Record of on call experience
- Mini-CEX (acute setting)
- Case Based Discussion (CBD)
- Consultant feedback

## Therapeutics and Safe Prescribing

**Objective:** To progressively develop ability to prescribe, review and monitor appropriate therapeutic interventions relevant to clinical practice in specific specialities including non-pharmacological therapies and preventative care.

**Medical Council Domains of Good Professional Practice:** Patient Safety and Quality of Patient Care.

### KNOWLEDGE

- Pharmacology, therapeutics of treatments prescribed, choice of routes of administration, dosing schedules, compliance strategies; the objectives, risks and complications of treatment cost-effectiveness
- Indications, contraindications, side effects, drug interaction, dosage and route of administration of commonly used drugs
- Commonly prescribed medications
- Adverse drug reactions to commonly used drugs, including complementary medicines
- Identifying common prescribing hazards
- Identifying high risk medications
- Drugs requiring therapeutic drug monitoring and interpretation of results
- The effects of age, body size, organ dysfunction and concurrent illness or physiological state e.g. pregnancy on drug distribution and metabolism relevant to own practice
- Recognising the roles of regulatory agencies involved in drug use, monitoring and licensing e.g. IMB, and hospital formulary committees
- Procedure for monitoring, managing and reporting adverse drug reaction
- The role of The National Medicines Information Centre (NMIC) in promoting safe and efficient use of medicine
- Differentiating drug allergy from drug side effects
- Know the difference between an early and late drug allergy, and drug side-effects
- Good Clinical Practice guidelines for seeing and managing patients who are on clinical research trials
- Best practice in the pharmacological management of cancer pain
- The management of constipation in children receiving palliative care

### SKILLS

- Writing a prescription in line with guidelines
- Appropriately prescribing for children and pregnant adolescent
- Making appropriate dose adjustments following therapeutic drug monitoring, or physiological change (e.g. deteriorating renal function)
- Reviewing and revising patients' long term medications
- Anticipating and avoiding defined drug interactions, including complementary medicines
- Providing comprehensible explanations to the patient, and carers when relevant, for the use of medicines
- Being open to advice and input from other health professionals on prescribing
- Participating in adverse drug event reporting
- Take and record an accurate drug allergy history and history of previous side effects

**ASSESSMENT & LEARNING METHODS**

- Consultant feedback
- Workplace based assessment e.g. Mini-CEX, DOPS, CBD
- Educational supervisor's reports on observed performance (in the workplace): prioritisation of patient safety in prescribing practice
- Guidance for health and social care providers - Principles of good practice in medication reconciliation (HIQA)

## Specialty Section

## Clinical Competence

**Objective:** To obtain clinical competence in the assessment, investigation, diagnosis and management of community acquired infection at consultant level.

- Take an appropriate history.
- Perform appropriate physical examination
- Perform appropriate investigator and specific skills including lumbar puncture
- Achieve an appropriate specific or differential diagnosis and initiate appropriate treatment.
- Develop the clinical and administrative skills to develop ID services.
- Competence in the management of cross specialty infections for example TB, hepatitis including B and C.

## KNOWLEDGE

### History

- Recognise symptom patterns
- Relevant, succinct and logical histories even when language, physical or mental impairment pose difficulties
- Appropriate use of interpreter
- Consider interaction of psychological and social well being on the physical symptoms to show empathy with the patient
- Ability to compile and condense patient's history from different sources as required

### Physical Examination

- Knowledge of the path of and physiological basis of physical signs
- Explain the procedure to the patient, ensure that patient discomfort is minimised
- Elicit appropriate physical signs
- Skilfully use instruments of examination
- Be aware of patient dignity, confidentiality and ethnic issues
- The relative's rights and responsibilities
- The need for a chaperone

### Investigation and Specific Skills

- Knowledge of the pathophysiological basis of tests
- Knowledge of its relevance
- Pathological basis of the test
- The cost and economy and safety of the investigation

### Differential Diagnosis

- A broad knowledge of clinical presentation of infectious diseases
- Knowledge of optimum treatment infections
- Knowledge of how to access up to date information
- Ability to assimilate clinical, laboratory and epidemiological information and to use this to differentiate between infections and other conditions
- Consideration of diagnostic issues in relation to fears of patient
- Ability to review and revise the diagnostic matrix

### Clinical acumen in the organisation and development of in-patient and out-patient services

- Awareness of differing models of health care delivery

**Interface with related infection disciplines**

- Understand the different components and roles of infection services e.g. public health, microbiology, immunology, epidemiology, travel medicine.
- Awareness of pathophysiology and management of patients with diseases spanning different specialties.

**SKILLS**

- Provide Consult service
- History taking
- Ability to give targeted differential diagnosis
- Ability to organise administrative and clinical services
- Ability to initiate and co-ordinate an effective consultation service
- Capacity to work with multidisciplinary team members and colleagues
- Ability to select appropriate tests
- Ability to interpret results
- Ability to perform interventions according to guidelines
- Establishing close rapport and understanding with laboratory staff
- Recognising the need of a patient to understand procedures and results of tests
- Interpersonal skills
- Capacity to impart knowledge

**ASSESSMENT & LEARNING METHODS**

- Mini-CEX
- Attend a minimum of one recognised international ID meetings per year

## Management of the Immunocompromised Patients

**Objective:** To obtain clinical competence at consultant level in the management of immunocompromised patients including those suffering from HIV/AIDS. Trainees must have the ability to recognise clinical manifestations in the immunocompromised including the ability to evaluate and take appropriate history, perform a physical examination and appropriately investigate an immune compromised patient. In addition, trainees must demonstrate their ability to reach a specific or differential diagnosis and to initiate appropriate treatment.

### KNOWLEDGE

- Knowledge of the pathophysiology and clinical symptoms and signs of infection in compromised host and understand their relevance
- Pathological basis of the tests
- The cost and economy and safety of the investigations in the immunocompromised
- Awareness and knowledge of patient support groups
- Biological and iatrogenic aetiology of immunodeficiency

### Specific HIV Positive Patient cohorts

- Prevention of Mother to Child Transmission, management of co-infection (HBV, HCV, TB)
- Antiretroviral treatment of children and adolescents

### SKILLS

- Assessment of level of immunodeficiency and infection risk
- Assessment of risk for and diagnose concurrent infection
- Immunodeficiency complications in specific patient cohorts – transplant patients, oncology patients, haematology patients, patients receiving biological modifiers
- Communication skills allowing patients to recognise risk activity and its management
- Ability to recognise clinical and laboratory manifestations of immunodeficiency
- Ability to explain the procedures to the patient/family, ensure that patient discomfort is minimised
- Elicit appropriate physical signs
- Skilfully use instruments of examination
- Consider interaction of psychological and social well being on the physical symptoms
- Establishing close rapport and understanding with laboratory staff
- Delivery of effective pain and psychological management
- Commitment to continuity of care through physical illness to death
- Multidisciplinary team working
- Prepared to work with patient support groups
- Appropriate use and interpretation of investigations e.g. microbiology, radiology
- Knowledge of resources required in investigations
- Understanding of positive and negative predictive values

### ASSESSMENT & LEARNING METHODS

- SpR Clinical Club
- Monthly Intracity PMTCT meetings



## **Viral Diagnostics**

**Objective:** Trainees must be competent in the use of specific HIV diagnostics.

### **KNOWLEDGE**

- Understanding of currently used diagnostic techniques
- Appropriate use of diagnostic techniques
- Knowledge of currently used diagnostic Tests
- Rational use of resources
- Discernment of patient's desires

### **SKILLS**

- Interpretation of resistance profiles - Hep B, HIV
- Counselling

### **ASSESSMENT & LEARNING METHODS**

- Weekly team meetings
- Consultant feedback

## **Antiretroviral Therapy**

**Objective:** Trainees must have the ability to institute and manage antiretroviral therapy.

### **KNOWLEDGE**

- Pharmacokinetics and mode of action of available therapy
- Mechanisms of resistance/cross resistance
- Knowledge on how to access further information e.g. on current guidelines etc.

### **SKILLS**

- Understanding of resistance/cross resistance
- Understanding of evidence based guidelines
- Facilitate patient decision-making based on knowledge and understanding of the issues
- Ability to recommend appropriate drug regimens
- Appropriate use of guidelines
- Monitor for and recognise side effects
- Ability to involve the patient in the process
- Unbiased application of knowledge to the clinical situation

### **ASSESSMENT & LEARNING METHODS**

- Weekly team meetings
- 3 monthly ARV multidisciplinary script meetings
- PENTA HIV training course ( Recommended)
- Consultant feedback

## Care of the child with Primary Immunodeficiency

**Objective:** To recognize and institute investigation and early management of children with primary immunodeficiencies.

### KNOWLEDGE

- Know the detailed functioning of the immune system including the complement system, phagocytic system, humoral and cellular immunity and the molecular and genetic basis of such functioning
- Understand the levels of functioning of the immune system at different ages and the relevance to vaccination strategies
- Understand the effect of malnutrition and disease on normal immune development
- Know the immunological basis of allergic disorders
- Know the immunological basis of autoimmune and inflammatory disorders
- Understand the basis of immunodysregulatory disorders including haemophagocytic lymphohistocytosis
- Understand the basis of hereditary angioedema and its complications
- Understand immune function testing and be able to interpret the results including antibody assays, complement, phagocytic cell and T cell tests
- Understand the molecular genetic tests available for the diagnosis basis of primary immunodeficiency disorders
- Understand the basis of secondary immunodeficiencies including those induced by infections, other disease and drug treatments

### SKILLS

- Ability to take an immunodeficiency focused clinical history and extended family history
- Knowledge of sentinel examination findings among children with primary immunodeficiencies
- Understand and be able to use appropriate antimicrobial prophylaxis in the immunocompromised child
- Understand and be able to use the full range of antimicrobial therapies for infections in the immunocompromised child
- Have knowledge and experience of the principles and practice of immunoglobulin treatment including the use of intravenous and subcutaneous treatment routes
- Understand concepts in management of autoimmune and inflammatory disorders
- Know how to manage acute anaphylaxis

### ASSESSMENT & LEARNING METHODS

- Joint Immunology case rounds (Dublin, Newcastle)
- Oxford course in Paediatric Infectious Diseases ( Recommended)
- Attendance at ESID/UKPIN meeting

## Management of the Hospital Acquired Infection

**Objective:** To acquire the skills necessary at consultant level to recognise and manage Hospital Acquired Infection, and institute control systems, including postoperative and intensive care related illness.

### Management of Infection

#### Particularly complex nosocomial infections in specific patients group

**Objective:** Trainees must have the ability to use the following skills in the context of hospital acquired infection: clinical history taking; appropriate examination; institute relevant investigations. Reach a satisfactory management plan.

#### KNOWLEDGE

- Symptom patterns
- Pathophysiology and origin of physical signs
- Common/typical problems
- Hospital acquired infection
- Confidentiality and consent issues in the unconscious patient

#### SKILLS

- Ability to discern the relevant features of a case whether or not the history is available
- Examination skills appropriate to the clinical situation
- Rational use of laboratory facilities
- Organised thinking
- Sensitivity to patients, carers and relative's anxieties
- Recognition of the need to involve the patient regardless of the level of comprehension or consciousness
- Policies of medical legal implications
- Awareness of political issues
- Working with management and the public

#### ASSESSMENT & LEARNING METHOD

- Grand round presentation

## Antimicrobial Stewardship

### Colonisation vs. infection, understanding of microbiology laboratory detection, management of multi-drug resistant infections, knowledge of new antimicrobials

**Objective:** To provide the trainee with the knowledge and skills necessary to understand and manage infection and colonization by organisms resistant to antimicrobials.

#### KNOWLEDGE

- Understanding of differentiation of colonisation and infection
- Understanding of microbiology laboratory data
- Management of resistant infections
- Knowledge of new antimicrobials
- Local/national/international antibiotic resistance patterns
- Local/national/international clinical standards, guidelines and protocols
- Mechanisms of resistance

#### Management of antimicrobial use

- Antimicrobial Prescribing
- Knowledge of antimicrobial agents, their spectrum of activity, mode of action, toxicity and appropriate use

#### Pharmacology and Toxicology

- Knowledge of pharmacology, toxicity and side effects of antimicrobial agents
- Recognition of limitations of individual agents and combination therapies

#### Antibiotic Control Policies

- Understanding of the importance of resource utilisation in relation to antimicrobials
- Knowledge of the relative costs of different agents

#### Understanding of prophylactic, pre-emptive and therapeutic prescribing

- Knowledge of the microbial agents likely to cause infection in different settings and their antimicrobial susceptibilities
- Understanding the principles underlying pre-operative prophylaxis

#### Resistant organisms: understanding the pharmacology of new agents

- Knowledge of infection control principles and policies

**SKILLS**

- Differentiation between colonisation and infection
- Discernment of situations giving rise to antibiotic resistance
- Application of knowledge to the clinical situation
- Consistency in approach to problems
- Multidisciplinary team working
- Interpretation of resistance patterns
- Understanding of laboratory data
- Antibiotic Stewardship
- Management and economics of antibiotic prescribing
- Selection and appropriate management of antimicrobial pharmacology and toxicology
- Application of the knowledge in simple and complex clinical settings
- Collaborative interaction with medical, laboratory and nursing colleagues and understanding of the patient's concerns relating to the use of more toxic agents
- Flexibility to change the choice of antimicrobial in the context of a change in clinical situation or laboratory data
- Teaching on appropriate antimicrobial prescribing
- Ensuring that patient care is optimum
- Recognition that there is often more than one antimicrobial for a clinical situation, that choices are not usually right or wrong
- Use of the knowledge to apply prophylaxis in the light of local epidemiological and individual clinical issues e.g. allergy
- Understand the needs and problems of the doctors managing the patient
- Be prepared to explain the issues of prophylaxis to patients
- Recognition of the common reasons for failure of control of infection principles
- Ability to apply infection control by explanation, education and application of written policies
- Ability to lead a multidisciplinary team and explain the necessary actions to control infection to other health care staff including administrative staff
- Sensitivity to the difficulties of establishing good infection control
- Recognition of the importance of clear messages and repetitive messages to health care professionals and patients delivered in a constructive manner

**ASSESSMENT & LEARNING METHODS**

- Grand Round presentations
- Audit

## **Management of Infection Problems Related to the ICU Including Management of Sepsis Syndrome and DIC**

**Objective:** Trainees must be able to identify and manage infection and colonization by multi-resistant organisms in the setting of the ICU.

### **KNOWLEDGE**

- Common infection problems in the intensive care setting
- Outcomes of infection in ICU setting
- Evidence base for infection management
- Pathophysiology of serious sepsis
- Likely outcomes
- Evidence base for outcomes

### **SKILLS**

- Prompt, relevant and appropriate decision-making
- Ability to justify course of action
- Clear communication skills with other carers and relatives
- Caring and consistent attitude to the seriously ill and dying patient
- Responsible and appropriate attitude to the withdrawal of care
- Assessment of situation
- Appropriate Antibiotic use (see also Antimicrobial Stewardship chapter)

### **ASSESSMENT & LEARNING METHOD**

- Team Meetings
- MDT Meetings
- Morbidity and Mortality Review Meetings
- Consultant feedback

## **Infection Control**

**Objective:** To develop skills required to recognise and manage Hospital Acquired Infections and to institute infection control systems when required.

### **KNOWLEDGE**

- Knowledge of principles of infection control
- Knowledge of principles of hospital infection surveillance
- Awareness of institutional resistance data
- Understanding of mechanisms in acquiring resistant infections
- Knowledge of specific risk factors for differing patient cohorts

### **SKILLS**

- Awareness of need to involve infection control practices
- Multidisciplinary care of complex patient
- Infection control policies

### **ASSESSMENT & LEARNING METHOD**

- Attendance at infection control committee meetings
- Hand Hygiene Training Session ( Mandatory)



## Management of Community Acquired Infections

### Meningitis/encephalitis, complicated soft tissue infections, bacterial endocarditis, sexually transmitted infections

**Objective:** The trainee should be able to diagnose, investigate and manage community acquired infection.

#### KNOWLEDGE

- Risk assessment
- Programme development – OPD services, home antibiotic services
- Awareness of evolving regional antimicrobial resistance data
- Knowledge of Gram stains
- Malaria smear

#### SKILLS

- Evaluation of patient and risk assessment
- Awareness of need for the involvement of other infection disciplines e.g. community outbreaks
- Ability to appropriately triage patients for in-patient and out-patient care
- Ability to identify the need to involve more senior colleagues appropriately
- Interpret Gram Stains
- Interpret Malaria smear

#### ASSESSMENT & LEARNING METHOD

- Case Based Discussion

## Management of Congenital and Neonatal Infections

**Objective:** The trainee should be able to diagnose, investigate and manage infections in premature and term infants

### KNOWLEDGE

- Congenital infection ( CMV, HSV, Toxoplasmosis & Syphilis etc)
- Common bacterial problems in the neonatal intensive care setting
- Outcomes of infection in NICU setting
- Evidence base for infection management
- Competent Risk Assessment for bacterial, fungal and viral infection
- Pathophysiology of serious sepsis
- Likely outcomes
- Evidence base for outcomes

### SKILLS

- Prompt, relevant and appropriate decision-making
- Ability to justify course of action
- Clear communication skills with other carers and relatives
- Responsible and appropriate attitude to the withdrawal of care
- Assessment of situation
- Appropriate Antibiotic use (see also Antimicrobial Stewardship chapter)

### ASSESSMENT & LEARNING METHOD

- Team Meetings
- MDT Meetings
- Morbidity and Mortality Review Meetings
- Consultant feedback

## **Imported Infection and Travel Medicine Health Advice, Risk Assessment and Vaccine Usage (Optional)**

**Objective:** Trainees must have the ability to provide health advice for travellers including vaccine usage, health hazards abroad and risk assessment for individuals, Malaria prophylaxis and advice.

### **KNOWLEDGE**

- General principles of vaccinology and infectious disease
- Geographical patterns of disease
- Knowledge of vaccines
- Geography of disease and resistance
- Problems of special groups of travellers, e.g. elderly, immunosuppressed
- Vaccinology in special patient cohorts
- Hazards of different types of travel
- Availability, efficacy and safety of vaccines
- Use and safety of antimalarial prevention measures
- Principles of organising a travel clinic

### **SKILLS**

- Risk assessment for the individual traveller
- Ability to take and record pre-travel medical and travel history
- Ability to perform risk assessment appropriate to traveller
- Ability to formulate and communicate appropriate verbal and written advice for traveller
- Ability to administer immunisations and prescribe antimalarials as necessary
- Multidisciplinary team working
- Ability to understand organisational and medico-legal aspects of travel clinic
- Consider interaction of psychological and social well being on the physical symptoms to show empathy with the patient

### **ASSESSMENT & LEARNING METHOD**

- OPD clinics
- CDC travel health website
- Consultant feedback

## **Vaccinology**

### **Health Advice, Risk Assessment and Vaccine Usage**

**Objective:** Trainees must have the ability to provide health advice regarding vaccine usage, both for routine immunization and in special cohorts including international travellers

#### **KNOWLEDGE**

- General principles of vaccinology and infectious disease
- Geographical patterns of disease
- Knowledge of vaccines
- Geography of disease and resistance
- Problems of special groups of travellers, e.g. elderly, immunosuppressed
- Vaccinology in special patient cohorts
- Hazards of different types of travel
- Availability, efficacy and safety of vaccines

#### **SKILLS**

- Ability to take and vaccination history
- Ability to perform risk assessment where there is vaccine hesitancy
- Ability to formulate and communicate appropriate verbal and written advice to parents regarding vaccination
- Ability to administer immunisations
- Multidisciplinary team working

#### **ASSESSMENT & LEARNING METHOD**

- National Immunisation Advisory Guidelines

## Imported Infections and Fevers Including Malaria

**Objective:** Trainees must have the ability to recognise and treat imported infections, diagnosis and management of imported fevers including malaria and diagnosis and management of other imported diseases.

### KNOWLEDGE

- Clinical and epidemiological features of imported diseases, especially manifestations and differential diagnosis of malaria
- Knowledge of ability and limitations of specialised diagnostic tests
- Management of imported infections

### SKILLS

- Elicit and record appropriate travel history
- Recognise symptoms and signs of imported disease
- Synthesise epidemiological and clinical data into differential diagnosis
- Select and interpret appropriate diagnostic tests
- Ability to manage common imported infections
- Respect patient dignity, confidentiality and be sensitive to ethnic issues
- Recognise the relative's rights and responsibilities
- Recognise the need for interpreter services
- Establishing close rapport and understanding with laboratory staff
- Recognising the need of a patient to understand procedures and results of tests
- Consideration of diagnostic issues in relation to fears of patient
- Flexibility of thinking to review and revise the diagnostic considerations
- Preparation and interpretation of a malaria smear

### ASSESSMENT & LEARNING METHOD

- Study Day
- Clinical SpR Club

**Dealing with High Security Risk Infections**

**Objective:** Trainees must have the ability to identify sources of specialist advice for unusual infections.

**KNOWLEDGE**

- Knowledge of location and availability of tertiary care and advice lines
- Knowledge of printed and electronic information sources
- Knowledge of High Security Unit Mater
- Knowledge of unusual infections

**SKILLS**

- Ability to recognise when tertiary level care/advice is needed and to seek it
- Ability to use printed and electronic information sources
- Awareness of own limitations and needs for specialist advice

**ASSESSMENT & LEARNING METHOD**

- Study day: Unusual infections (National Isolation Unit, Mater Hospital)

## Infection and Immigrants

**Objective:** Infection-related problems of immigrants.

### KNOWLEDGE

- Knowledge of health needs of different immigrant groups
- Epidemiological and clinical features of imported infection in immigrant groups
- Knowledge of the relative's rights and responsibilities
- Knowledge of population shifts
- Awareness of vaccine preventable disease in delayed entrance to the Irish Health Care system

### SKILLS

- Ability to work with interpreters and patient support groups
- Ability to recognise both acute and chronic infections in immigrants
- Consider interactions of psychological and social well-being on the physical symptoms and show empathy with the patient
- Be aware of patient dignity, confidentiality and ethnic issues
- The need for an interpreter
- Working with different population groups
- Update disease surveillance

### ASSESSMENT & LEARNING METHOD

- Communication

## **Interface with Related Infection Disciplines Particularly Public Health Medicine**

**Objective:** Trainees must have the ability to interact with the community infection team.

### **KNOWLEDGE**

- Knowledge of risks of community or different imported disease, including rare situations that require urgent public health intervention
- Knowledge of epidemiological systems available for the control of disease and how to access them
- Epidemiological control

### **SKILLS**

- Ability to make accurate risk assessment
- Ability to recognise when urgent epidemiological action is required
- Ability to recognise who must be involved in epidemiological control in different settings
- Co-operative working in the multidisciplinary team

### **ASSESSMENT & LEARNING METHOD**

- Study day - joint with Public Health



## Laboratory Medicine

**Objective:** To obtain an understanding of the role of the Microbiologist and Virologist and the importance of Microbiological techniques in ID and to understand the process and constraints around the microbiological report. Trainees must be competent to carry out basic microbiological bench work including critical interpretation of laboratory procedures in relation to laboratory diagnosis

### KNOWLEDGE

#### Basic microbiological bench work

- Knowledge of microbiological basis of disease
- Knowledge of the pathological basis of tests and the laboratory factors affecting their interpretation

#### Microbiological reporting

- Knowledge of the pathways of microbiological reporting
- Knowledge of the boundaries of use of microbiological information in the context of clinical information

#### Knowledge of appropriate testing and interpretation of results

- Knowledge of the diagnostic tests available in the routine laboratory with understanding of further tests available at specialised centres
- Knowledge of antibiotic modes of action, side effects and interactions
- Knowledge of other interventions (e.g. abscess drainage) useful in management of infected patients
- Antibigrams
- Knowledge of new developments in molecular diagnostics

### SKILLS

- Ability to interpret the findings of microbiological investigations and recognise their limitations
- Establishing close rapport and understanding with laboratory staff
- Ability to communicate with colleagues and other doctors in different disciplines and enable them to appreciate the relevance of the data
- Ability to interpret laboratory data in the context of clinical information
- Ability to consider data in context of clinical information and when to obtain further clinical data
- Ability to provide appropriate antibiotic and other management advice at the bedside and over the telephone
- Awareness of patient dignity, confidentiality and ethnic issues
- Consideration of interaction of psychological and social well being on the physical symptoms and demonstration of empathy to patients
- Interpretation of molecular diagnostics

### ASSESSMENT & LEARNING METHOD

- Liaison with Microbiology laboratory
- Weekly ID/Microbiology Rounds ( TCUH)

**Understanding of Prophylactic, Pre-Emptive and Therapeutic Prescribing**

**Objective:** Trainees must demonstrate competence in the use of pre-operative antibiotic prophylaxis.

**KNOWLEDGE**

- Knowledge of the microbial agents likely to cause infection in different settings and their antimicrobial susceptibilities
- Understanding the principles underlying pre-operative prophylaxis

**SKILLS**

- Use of the knowledge to apply prophylaxis in the light of local epidemiological and individual clinical issues e.g. allergy
- Understand the needs and problems of the doctors managing the patient
- Be prepared to explain the issues of prophylaxis to patients
- Multidisciplinary team working

**ASSESSMENT & LEARNING METHODS**

Consultant feedback

## Documentation of Requirements for Training

Curriculum Requirement	Required/ Desirable	Minimum Requirement	Reporting Period	Form Name
<b>Section 1 - Training Plan</b>				
<b>Personal Goals Plan</b> (Copy of agreed Training Plan for your current training year signed by both Trainee & Trainer)	Required	1	Year of training	Personal Goals
<b>Section 2 - Training Activities</b>				
<b>Outpatient Clinics</b>				Clinical Activities
ID Clinics	Required	10	Training Programme	
Immunology Clinics	Desirable	10	Training Programme	
<b>Ward Rounds/Consultations</b>			Training Programme	Clinical Activities
ID/Microbiology Rounds	Desirable	40	Training Programme	
<b>Emergencies/Complicated Cases</b> (Diagnosis of nature of problem and its presentation, emergency case for investigation)	Desirable	1	Training Programme	Cases
<b>Additional/Special Experience Gained</b>	Desirable	1	Training Programme	Clinical Activities
<b>Laboratory Experience</b>	Desirable	1	Training Programme	Laboratory Experience
<b>Relatively Unusual Cases</b>	Desirable	1	Training Programme	Cases
<b>Chronic Cases/Long term care</b>	Desirable	1	Training Programme	Cases
<b>ICU/CCU Cases</b>	Desirable	1	Training Programme	Cases
<b>Section 3 - Educational Activities</b>				
<b>Courses</b>			Training Programme	Course Attendance
PENTA HIV training course	Desirable	1	Training Programme	
Paediatric Infectious Diseases (Oxford)	Desirable	1	Training Programme	
Hand Hygiene Training session	Desirable	1	Training Programme	
Child Protection	Desirable	1	Training Programme	
Mastering Communications	Desirable	1	Training Programme	
Performing Audit (Online)	Desirable	1	Training Programme	
HST Leadership in Clinical Practice	Desirable	1	Training Programme	
Ethics Foundations	Desirable	1	Training Programme	
Ethics for Paediatrics	Desirable	1	Training Programme	
APLS	Desirable	1	Training Programme	
Breaking Bad News	Desirable	1	Training Programme	
SafeMed	Desirable	1	Training Programme	
Occupational Stress	Desirable	1	Training Programme	

Curriculum Requirement	Required/Desirable	Minimum Requirement	Reporting Period	Form Name
Introduction to Health Research (online)	Desirable	1	Training Programme	
Masterclass Series	Desirable	1	Training Programme	
Effective Teaching Skills	Desirable	1	Training Programme	
Medication Safety (online)	Desirable	1	Training Programme	
Safe Prescribing (online)	Desirable	1	Training Programme	
HCAI (online)	Desirable	1	Training Programme	
Wellness Matters	Desirable	1	Training Programme	
<b>Study Days</b>	Desirable	5	Training Programme	Study Day Attendance
<b>National/International meetings (minimum attend 1 per year)</b>				Additional Professional Experience
ESID/UKPIN	Desirable	1	Training Programme	
<b>In-house activities</b>			Training Programme	Attendance at Hospital Based Learning
Immunology Case Rounds	Desirable	5	Training Programme	
PMTCT meetings	Desirable	5	Training Programme	
ARV	Desirable	5	Training Programme	
Morbidity and Mortality Review Meetings	Desirable	2	Training Programme	
Grand Rounds	Required	5	Training Programme	
Journal Clubs	Desirable	5	Training Programme	
MTD meetings	Required	20	Training Programme	
Radiology Conferences	Desirable	5	Training Programme	
Lecture	Desirable	1	Training Programme	
Seminar	Desirable	1	Training Programme	
<b>Examinations</b>		1	Training Programme	Examinations
<b>Formal Teaching Activity (minimum 1 formal teaching session per month from the categories below)</b>	Desirable	10	Training Programme	Delivery of Teaching
Lecture			Training Programme	
Tutorial			Training Programme	
Bed side Teaching			Training Programme	
<b>Research</b>	Desirable	1	Training Programme	Research Activities
<b>Audit activities and Reporting</b> (1 per year either to start or complete, Quality Improvement (QI) projects can be uploaded against audit)	Required	1	Year of Training	Audit & QI

Curriculum Requirement	Required/ Desirable	Minimum Requirement	Reporting Period	Form Name
<b>Publications</b>	Desirable	1	Training Programme	Additional Professional Experience
<b>Presentations</b>	Desirable	1	Training Programme	Additional Professional Experience
<b>Committee Attendance</b>	Desirable		Training Programme	Additional Professional Experience
Infection Control Committee	Desirable	1	Training Programme	
<b>Section 4 - Assessments</b>				
<b>CBD</b>	Required	1	Training Programme	CBD
<b>Mini-CEX</b> (At least two Mini-CEX assessments)	Desirable	2	Training Programme	Mini-CEX
<b>Quarterly Assessments/ End-of-Post</b>	Required	4	Training Programme	End of Post/Quarterly Assessment
<b>End-of-Year Assessments</b>	Required	1	Training Programme	End of Year Evaluation