



**IRISH COMMITTEE  
ON HIGHER  
MEDICAL TRAINING**

ROYAL COLLEGE OF  
PHYSICIANS OF IRELAND

INTERNATIONAL CLINICAL FELLOWSHIP TRAINING IN

**RHEUMATOLOGY -  
VASCULITIS**



**This curriculum of training in Rheumatology was developed in 2015 and undergoes an annual review by Dr. John Ryan, National Specialty Director, and Leah O’Toole, Head of Postgraduate Training and Education, and by the Rheumatology Training Committee. The curriculum is approved by the Irish Committee on Higher Medical Training.**

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**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>
GENERAL PRINCIPLES OF RHEUMATIC DISEASE KNOWLEDGE & MANAGEMENT.....	30
WIDESPREAD AND REGIONAL PAIN .....	31
INFLAMMATORY ARTHRITIS (IA) .....	33
CONNECTIVE TISSUE DISORDERS AND RELATED CONDITIONS .....	35
THE VASCULITIDES AND ASSOCIATED SYNDROMES.....	37
OTHER SYSTEMIC ILLNESSES.....	39
MISCELLANEOUS ARTHROPATHIES.....	41
INFECTIONS .....	42
OA AND RELATED CONDITIONS .....	44
CRYSTAL ARTHROPATHIES.....	45
ENDOCRINE / METABOLIC AND STORAGE DISEASES .....	46
HERITABLE DISEASES WITH CONSEQUENCES FOR THE MUSCULO-SKELETAL SYSTEM .....	47
CANCER AND THE MUSCULOSKELETAL SYSTEM .....	48
PAEDIATRIC RHEUMATOLOGY.....	50
<b>DOCUMENTATION OF MINIMUM REQUIREMENTS FOR TRAINING .....</b>	<b>51</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 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) for medical specialities is up to 3 years, after which the overseas doctors will be required to return to their country of origin. It should be noted that the standard programme length is 2 years and that to progress to the third year of training, trainees must hold the full MRCP/UK.

- 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 of 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 international trainees of all specialties 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 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 patients 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, families 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
- How to structure an interview to obtain/convey information; identify concerns, expectations and priorities; promote understanding, reach conclusions; use appropriate language.
- How to empower the patient 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 adults 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 e.g. driving

#### 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
- ACLS 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/ACLS (or APLS for Paediatrics)
- 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**

- ACLS 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
- Effects of medications on patient activities including potential effects on a patient's fitness to drive
- 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 adult patients receiving palliative care

### SKILLS

- Writing a prescription in line with guidelines
- Appropriately prescribing for the elderly, children and pregnant and breast feeding women
- 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
- Advising patients (and carers) about important interactions and adverse drug effects including effects on driving
- 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

## General Principles of Rheumatic Disease Knowledge & Management

**Objectives:** To provide a holistic approach to the diagnosis and management of patients with rheumatic disease.

### KNOWLEDGE

#### Holistic approach to the rheumatic diseases

- Patient education, exercise, nutrition, social impact, employment / work disability, lifestyle management
- Importance of multi-disciplinary team
- Pregnancy: planning to conceive / pregnancy and breast-feeding
- Pain management

#### Diagnostic approach to the rheumatic diseases

- Importance of differential diagnosis
- Laboratory
- Immunology
- Neurophysiology
- Infection
- Radiology
- Medical arthroscopy
- Gait analysis
- Procedures

#### Education and research in the rheumatic diseases

- Importance of teaching
- Importance of life-long learning
- Audit
- Research
- Medico-legal issues

### SKILLS

- Take a history and perform a clinical examination of a patient with a musculoskeletal disorder to include special details and methods outlined in the training record.
- Appropriate investigations
- Multidisciplinary working

### ASSESSMENT & LEARNING METHODS

- Mini-CEX
- Case Based Discussion
- Quarterly/Annual Assessment

## Widespread and Regional Pain

**Objective:** To understand epidemiology, pathogenesis, clinical presentations, underlying aetiologies and treatment pathways of widespread and regional pain syndromes and sports-related injuries; to know when to refer to other relevant disciplines such as Orthopaedics, plastics surgery, pain management and members of the MDT; to understand relevance of co-morbid conditions for morbidity and mortality; to understand safety aspects and risk-benefit ratio of treatments; to understand the role of patient education in these conditions.

### KNOWLEDGE

#### For all below widespread and regional pain

- Definition
- Epidemiology
- Local anatomy where appropriate
- Pathogenesis
- Pathophysiology
- Clinical features
- Musculoskeletal
- Co-morbid conditions
- Prognosis
- Differential diagnosis
- Clinical assessments
- Investigations
- Treatment

#### 1. Fibromyalgia

#### 2. Specific joints:

- a. Temporomandibular joint (TMJ) dysfunction
- b. Cervical, thoracic or lumbar spine pain
- c. The shoulder
- d. The elbow
- e. The hand and wrist
- f. The hip
- g. The Knee
- h. The ankle and foot

#### 3. Entrapment Neuropathies:

- a. Thoracic outlet syndrome
- b. ulnar nerve compression syndromes
- c. median nerve compression syndromes
- d. piriformis syndrome
- e. meralgia paresthetica
- f. tarsal tunnel syndrome
- g. Morton's metatarsalgia

#### 4. Complex Regional Pain Syndromes (reflex sympathetic dystrophy)

**SKILLS**

- Detailed and focussed history and examination pertinent to all joint areas
- Ability to perform rapid screening assessment and detailed regional assessments
- Clear knowledge of functional anatomy and normal range of motion of all joint areas
- Holistic approach to diagnosis and treatment
- Knowledge of potential side-effects of treatment
- Competence at reading plain x-rays of all joint areas
- Competence at reading MRI of all joint areas
- Understanding of role of neurophysiology in specific regional pain syndromes
- Knowledge of multi-disciplinary team skills in relation to joint / spine pathology and rehabilitation

**ASSESSMENT AND LEARNING METHODS**

- Mini-CEX: Supervised history, clinical examination and radiological assessment
- DOPS
  - 1st CMC joint
  - Wrist joint
  - Shoulder (gleno-humeral) joint – anterior approach
  - Shoulder joint – medial approach
  - Knee joint - medial approach
  - Knee joint – lateral approach
  - Ankle joint
  - 1st MTP joint
- Case-based discussion
- Interactive lectures

## Inflammatory Arthritis (IA)

**Objectives:** To understand epidemiology, pathogenesis, genetic susceptibility, clinical presentations, underlying aetiologies and treatment pathways of inflammatory arthritis; to know when to refer to other relevant disciplines such as Orthopaedics, plastics surgery, pain management and members of the MDT; to understand relevance of co-morbid conditions for morbidity and mortality; to understand safety aspects and risk-benefit ratio of treatments; to understand the role of patient education in inflammatory arthritis.

**Objectives:** To understand epidemiology, pathogenesis, clinical presentations, underlying aetiologies and treatment pathways of the sero-negative spondyloarthropathies; to appreciate the common and distinguishing features of these conditions; to understand modifiable risk factors; to understand safety aspects and risk-benefit ratio of treatments; to be up to date with current and experimental therapies; to understand the role of the MDT in amelioration of symptoms and avoidance of joint damage.

### KNOWLEDGE

#### For all inflammatory arthritis:

- Definition of IA
- ACR/EULAR criteria for diagnosis
- Epidemiology:
- Pathogenesis
- Genetics of IA
- Pathology:
- Clinical features of IA
- Differential diagnosis
- Clinical assessments in IA:
- Investigations
- Treatment

1. Rheumatoid arthritis (RA)
2. Sero-Negative Spondyloarthropathies
  - a. Ankylosing spondylitis (AS)
  - b. Psoriatic arthritis
  - c. Inflammatory bowel disease-related arthritis
  - d. Reactive arthritis

### SKILLS

- Detailed and focussed history and examination
- Ability to clearly differentiate mechanical from inflammatory symptoms and signs
- Understanding and application of knowledge in relation to co-morbid diseases
- Holistic approach to diagnosis and treatment
- Ability to diagnosis early inflammatory arthritis
- Ability to recognise resistant inflammatory arthritis
- Competence at reading plain x-rays of all joint areas and identifying diagnostic features of different sub-types of inflammatory arthritis
- Ability to correctly interpret scintigraphy and MRI in inflammatory arthritis
- Understanding of role of focussed lab and radiological investigations
- Large and small joint aspiration and injection (glenohumeral, sternoclavicular, elbow, wrist, metacarpophalangeal, interphalangeal, knee, ankle, 1st metatarsophalangeal)
- Injection of enthesal areas e.g. trochanteric, lateral and medial epicondyles etc

### **ASSESSMENT AND LEARNING METHODS**

- Mini-CEX: Supervised history, clinical examination and radiological assessment
- DOPS: Supervised joint aspiration and injection
- Case-based discussion
- Interactive lectures

## Connective Tissue Disorders and Related Conditions

**Objectives:** To understand epidemiology, pathogenesis, clinical presentations, underlying aetiologies and treatment pathways of the connective tissue disorders; to appreciate the common and distinguishing features of these conditions; to understand modifiable risk factors; to be familiar with immunological complexities, including microscopic diagnoses; to understand safety aspects and risk-benefit ratio of treatments; to be up to date with current and experimental therapies; to understand the role of the MDT in amelioration of symptoms and avoidance of tissue damage; to appreciate role of other disciplines, such as haematology, nephrology, neurology, oral medicine / surgery, dermatology etc in the management of these systemic conditions.

### KNOWLEDGE

#### For all connective tissue disorders and related conditions:

- Definitions
  - Criteria for classification and diagnosis
  - Epidemiology
  - Pathology / pathogenesis
  - Clinical features
  - Differential diagnosis
  - Clinical assessment
  - Investigations
    - laboratory: routine / biomarkers
    - Eyes / salivary glands
  - Treatment
1. Sjogren syndrome
  2. Systemic lupus erythematosus (SLE)
  3. Anti-phospholipid syndrome (APLS)
  4. Systemic sclerosis
  5. Scleroderma-like syndromes
    - Localised scleroderma (morphea)
    - Scleromyxoedema
    - Nephrogenic systemic fibrosis
    - Eosinophilic cutaneous fibrosis
    - Chronic graft vs host disease
    - Environmental and drug exposure associated with scleroderma variants
  6. Inflammatory muscle disease
  7. Non-inflammatory myopathies
  8. Mixed connective tissue disease (MCTD) and overlap syndromes
  9. Raynaud phenomenon

**SKILLS**

- Detailed and focussed history and examination
- Understanding of common and distinct features of connective tissue disorders
- Understanding and application of knowledge in relation to prognostic factors
- Understanding and application of knowledge in relation to co-morbid diseases
- Holistic approach to diagnosis and treatment
- Awareness of risk / benefit profile of treatments
- Ability to diagnose early connective tissue disease
- Ability to recognise and prevent adverse prognostic features
- Understanding of role of focussed lab, radiology, pathology and neurophysiology investigations
- Interpretation of above investigations
- Ability to independently read plain film, CT and MRI abnormalities in connective tissue diseases

**ASSESSMENT AND LEARNING METHODS**

- Mini-CEX: Supervised history, clinical examination, radiology and pathology assessment
- Case-based discussion
- DOPS
  - Hand-flexor tendon nodule
  - De Quervain's tenosynovitis
  - Carpel tunnel
  - Lateral epicondylitis
  - Sub acromial bursa
  - Trochanteric bursitis
  - Anserine bursitis
  - Plantar fascia
  - Mortons neuroma
- Interactive lectures

## The Vasculitides and Associated Syndromes

**Objectives:** To understand epidemiology, pathogenesis, clinical presentations, underlying aetiologies and treatment pathways of the vasculitides; to appreciate the common and distinguishing features of these conditions; To distinguish primary systemic vasculitides from secondary forms of vasculitis and vasculitis mimics; to understand modifiable risk factors; to accurately assess disease activity and to differentiate between symptoms and signs of active inflammation from features attributable to tissue damage or co-morbid conditions; to be familiar with immunological complexities, including microscopic diagnoses; to proactively manage the risk of accelerated atherosclerosis; to understand safety aspects and risk-benefit ratio of treatments; to be up to date with current and experimental therapies; to understand the role of the MDT in amelioration of symptoms and avoidance of tissue damage; to appreciate role of other disciplines, such as haematology, nephrology, neurology, oral medicine / surgery, dermatology etc in the management of these systemic conditions; to utilize strategies to minimize complications of immunosuppressive therapy.

### KNOWLEDGE

#### For vasculitides and associated syndromes:

- Definitions of GCA from clinical and pathological perspective
  - Criteria for classification and diagnosis
  - Epidemiology
  - Pathology / pathogenesis
  - Clinical features
  - Clinical assessments
  - Investigations
  - Treatment
1. Giant cell arteritis (GCA)
  2. Polymyalgia rheumatic (PMR)
  3. Takayasu arteritis
  4. Kawasaki disease
  5. Polyarteritis nodosa (PAN) and microscopic polyangiitis (MPA)
  6. Granulomatosis with polyangiitis (Wegener's)
  7. Eosinophilic granulomatosis with polyangiitis (EGPA) (formerly known as Chung-Strauss syndrome)
  8. Behcet's disease
  9. Henoch-Schonlein purpura (HSP)
  10. Cryoglobulinemic vasculitis
  11. Cutaneous vasculitis and panniculitis
  12. Primary vasculitis of the central nervous system (PACNS)
  13. Cogan's syndrome

**SKILLS**

- Detailed and focussed history and examination
- Understanding of common and distinct features of vasculitides
- Understanding and application of knowledge in relation to prognostic factors
- Understanding and application of knowledge in relation to co-morbid diseases
- Holistic approach to diagnosis and treatment
- Awareness of risk / benefit profile of treatments
- Ability to recognise pertinent clinical features
- Ability to recognise and prevent adverse prognostic features
- Understanding of role of focussed lab, radiology, pathology and neurophysiology investigations
- Interpretation of above investigations
- Ability to independently read pertinent radiological films eg angiography
- Ability to independently perform urine microscopy

**ASSESSMENT AND LEARNING METHODS**

- Mini-CEX: Supervised history, clinical examination, radiology and pathology assessment
- Case-based discussion
- Interactive lectures

## Other Systemic Illnesses

**Objectives:** To understand epidemiology, pathogenesis, clinical presentations, underlying aetiologies, genetics and treatment pathways of each of these diseases; to recognise and diagnose appropriately; to understand modifiable risk factors; to be familiar with safety aspects and risk-benefit ratio of treatments; to be up to date with current and experimental therapies; to understand the role of the MDT in amelioration of symptoms and avoidance of tissue damage; to appreciate role of other disciplines, such as haematology, nephrology, neurology, oral medicine / surgery, dermatology etc in the management of these systemic conditions.

### KNOWLEDGE

#### For other systemic illnesses:

- Definitions from clinical and pathological perspective
  - Epidemiology
  - Pathology / pathogenesis /immunology
  - Clinical features
  - Clinical assessments
  - Differential diagnosis
  - Investigations
  - Treatment
1. Kikuchi-Fujimoto disease (KFD)
  2. Systemic autoinflammatory diseases/Recurrent fever syndromes
    - a. Familial Mediterranean fever (FMF)
    - b. TNF receptor associated periodic syndrome (TRAPS)
    - c. Hyperimmunoglobulinaemia D with periodic fever syndrome (HIDS)
    - d. Cryopyrinopathies: familial cold autoinflammatory syndrome, Muckle Wells syndrome, Neonatal-onset multisystem inflammatory disease / chronic infantile neurological cutaneous and articular syndrome (NOMID/CINCA)
  3. Sarcoidosis
  4. Relapsing polychondritis
  5. Amyloidoses

### SKILLS

- Detailed and focussed history and examination
- Understanding of common and distinct features of recurrent fever syndromes
- Understanding of common and distinct features of amyloidoses
- Knowledge of common and rare features of KFD and relapsing polychondritis
- Understanding and application of knowledge in relation to prognostic factors
- Understanding and application of knowledge in relation to co-morbid diseases
- Holistic approach to diagnosis and treatment
- Awareness of risk / benefit profile of treatments
- Ability to recognise pertinent clinical features
- Ability to recognise and prevent adverse prognostic features
- Understanding of role of focussed lab, radiology, pathology and functional investigations
- Interpretation of above investigations
- Independently read pertinent radiological films e.g. chest or musculoskeletal X-rays
- Ability to independently interpret classic pathology microscopic features

## **ASSESSMENT AND LEARNING METHODS**

- Mini-CEX: Supervised history, clinical examination, radiology and pathology assessment
- Case-based discussion
- Interactive lectures

## Miscellaneous Arthropathies

**Objectives:** To understand epidemiology, pathogenesis, clinical presentations, underlying aetiologies and treatment pathways of these arthropathies; to understand modifiable risk factors; to understand safety aspects and risk-benefit ratio of treatments; to be up to date with current and experimental therapies; to understand the role of the MDT in amelioration of symptoms and avoidance of joint damage; to appreciate the role and timeliness of surgery.

### KNOWLEDGE

#### For miscellaneous arthropathies:

- Definition and classification
- Epidemiology and risk factors
- Pathology / pathogenesis
- Clinical features
- Differential diagnosis
- Clinical assessments
- Investigations
- Treatment

1. Hypertrophic osteoarthropathy
2. Multicentric nodular reticulohistiocytosis
3. Pigmented villonodular synovitis
4. SAPHO syndrome (synovitis, acne, pustulosis, hyperostosis, osteitis)
5. Synovial osteochondromatosis

### SKILLS

- Detailed and focussed history and examination
- Understanding of clinical and pathological features of each of these conditions
- Understanding and application of knowledge in relation to prognostic factors
- Understanding and application of knowledge in relation to co-morbid diseases
- Holistic approach to diagnosis and treatment
- Awareness of risk / benefit profile of treatments
- Ability to recognise pertinent clinical features
- Ability to recognise and prevent adverse prognostic features
- Understanding of role of focussed lab, radiology, pathology and functional investigations
- Interpretation of above investigations
- Ability to independently read pertinent radiological films e.g. musculoskeletal x-rays / MRI
- Ability to independently interpret classic pathology microscopic features

### ASSESSMENT AND LEARNING METHODS

- Mini-CEX: Supervised history, clinical examination, radiology and pathology assessment
- Case-based discussion
- Interactive lectures

## Infections

**Objectives:** To understand epidemiology, pathogenesis, clinical presentations, underlying aetiologies and treatment pathways of infection-related arthritis / osteomyelitis; to recognise and diagnose appropriately; to be able to independently interpret investigations, including lab results, radiological investigations and microbiology / pathology samples; to have knowledge of modifiable risk factors; to be aware of implications of infections for prosthetic joints; to know when to refer to relevant disciplines, such as microbiology, orthopaedics, pain management and members of the MDT; to appreciate relevance of co-morbid conditions for morbidity and mortality; to be up to date with current literature on infections associated with rheumatic illnesses; to have knowledge of relevant vaccinations for immunosuppressed patients.

### KNOWLEDGE

#### For all infections:

- Role of underlying disease as risk factor for infection
- Epidemiology
- Genetics
- Pathology / pathogenesis
- Common / atypical clinical features
- Infections in prosthetic joints
- Outcome / prognosis
- Co-morbid factors
- Clinical assessment
- Investigations
- Treatment pathways
- Prevention / identification of populations at risk
- Vaccinations

1. Infections in patients with rheumatic illnesses (General principles)
2. Bacterial infections
  - a. Septic arthritis and osteomyelitis
  - b. Disseminated gonococcal infection (DGI)
  - c. Syphilis
  - d. Lyme disease
  - e. Brucellosis
  - f. Whipple disease
  - g. Mycobacterial infections; Includes tuberculosis and leprosy
  - h. Rheumatic fever
3. Fungal and parasitic infections –
  - a. Histoplasmosis
  - b. Cryptococcus
  - c. Mycoses (eg blastomycosis, coccidioidomycosis etc)
  - d. Candidiasis
  - e. Sporotrichosis
  - f. Protozoan infections etc.
4. Viral infections:
  - a. Parvovirus B19
  - b. Rubella

- c. Hepatitis B
  - d. Hepatitis C
  - e. HIV
  - f. Viruses encountered in the Western world
  - g. Emerging viruses
5. Vaccinations in patients with rheumatic diseases

### SKILLS

- Detailed and focussed history and examination
- Ability to identify rare and common infections in at-risk patient populations
- Understanding and application of knowledge in relation to co-morbid diseases
- Holistic approach to diagnosis and treatment
- Understanding and application of knowledge in relation to vaccinations in immunosuppressed patients
- Understanding of role of focussed lab and radiological investigations
- Ability to correctly and independently interpret relevant lab and radiological investigations
- Large and small joint aspiration and injection (glenohumeral, sternoclavicular, elbow, wrist, metacarpophalangeal, interphalangeal, knee, ankle, 1st metatarsophalangeal)

### ASSESSMENT AND LEARNING METHODS

- Mini-CEX: Supervised history, clinical examination and radiological assessment
- DOPS: Supervised joint aspiration and injection
- Case-based discussion
- Interactive lectures

## OA and Related Conditions

**Objectives:** To understand epidemiology, pathogenesis, clinical presentations, underlying aetiologies and treatment pathways of osteoarthritis; to understand why certain joints are pre-disposed to osteoarthritis; to know when to refer to other relevant disciplines such as Orthopaedics, pain management and members of the MDT; to understand modifiable risk factors; to understand safety aspects and risk-benefit ratio of treatments; to be up to date with current literature on OA and related conditions.

### KNOWLEDGE

#### OA and related conditions:

- Definitions of OA from clinical, radiological and pathological perspectives
  - ACR criteria for classification and diagnosis
  - Epidemiology:
    - Joints typically involved in OA
    - Joints not typically involved in OA
  - Exercise and OA
  - Pathology / pathogenesis of OA
  - Genetics of OA
  - Clinical features
  - Clinical assessment in OA
  - Investigations
  - Treatment
1. Osteoarthritis (OA)
  2. DISH
  3. Neuropathic arthropathy
  4. Osteonecrosis
  5. Miscellaneous:
    - a. Ochronosis
    - b. Kashin-Beck disease
    - c. Mseleni disease

### SKILLS

- Detailed and focussed history and examination
- Ability to clearly differentiate mechanical from inflammatory symptoms and signs
- Understanding and application of knowledge in relation to co-morbid diseases
- Ability to recognise atypical osteoarthritis
- Holistic approach to diagnosis and treatment
- Competence at reading plain radiologic films of all joint areas
- Ability to correctly interpret scintigraphy, ultrasonography and MRI in OA
- Understanding of role of focussed lab and radiological investigations
- Large joint aspiration and injection

### ASSESSMENT AND LEARNING METHODS

- Min-CEX: Supervised history and clinical examination
- DOPS: Supervised joint aspiration and injection
- Case-based discussion
- Interactive lectures

## Crystal Arthropathies

Gout, pseudogout, basic calcium phosphate crystal disease, other crystals

**Objectives:** To understand epidemiology, pathogenesis, clinical presentations, underlying etiology and treatment pathways of crystal arthropathies; to understand modifiable risk factors and to recognise associated co-morbid conditions; to competently diagnose common and unusual crystals using polarizing microscopy; to understand safety aspects and risk-benefit ratio of treatments.

### KNOWLEDGE

#### Crystal Arthropathies knowledge:

- Definitions of gout from clinical, radiological and microscopic perspectives
- Epidemiology:
  - prevalence, risk factors (modifiable / non-modifiable)
  - association with the metabolic syndrome
- Pathogenesis
- Clinical features
- Investigation
- Management

1. Gout
2. Pseudo-gout: calcium pyrophosphate dihydrate deposition disease (CPPD)
3. Basic calcium phosphate crystal deposition disease
4. Other crystal arthropathies

### SKILLS

- Detailed and focussed history and examination
- Ability to differentiate crystal arthropathies from other inflammatory joint diseases
- Understanding and application of knowledge in relation to co-morbid diseases
- Holistic approach to diagnosis and treatment
- Competence at recognising features of gout / pseudogout / calcific tendonitis on plain radiography
- Understanding of role of focussed lab and radiological investigations
- Ability to obtain appropriate samples from involved joints / tissues
- Competence at independently diagnosing crystal arthropathies using polarizing microscopy

### ASSESSMENT AND LEARNING METHODS

- DOPS
  - Supervised joint aspiration and injection
  - Supervised use of polarizing microscopy
- Case-based discussion
- Interactive lectures

## Endocrine / Metabolic and Storage Diseases

**Objectives:** to recognise early and established manifestations of endocrine, metabolic and storage diseases as outlined below; to competently diagnose typical and atypical features of these disorders; to recognise musculo-skeletal manifestations of these disorders; to competently perform urine microscopy to diagnose cellular casts; to understand how treatment of these disorders influences the musculo-skeletal manifestations.

### KNOWLEDGE

#### 1. Endocrine /Metabolic and storage disease:

- a. Rheumatic manifestations of endocrine disease
  - i. Diabetes mellitus
  - ii. Acromegaly
  - iii. Adrenal dysfunction
  - iv. Thyroid disorders
  - v. Hyperparathyroidism
- b. Rheumatic Manifestations of Renal Disease
- c. Paget Disease of Bone
- d. Osteoporosis
- e. Osteomalacia and rickets

#### 2. Deposition / Storage Disorders

- a. Hyperlipidemia
- b. Haemochromatosis
- c. Gaucher's disease
- d. Mucopolysaccharidoses

### SKILLS

- Detailed and focussed history and examination
- Ability to recognise impact of storage disorders on musculoskeletal presentations
- Understanding and application of knowledge in relation to co-morbid diseases
- Holistic approach to diagnosis and treatment
- Competence at diagnosing radiological features of storage diseases
- Understanding the role of focussed lab and radiological investigations

### ASSESSMENT AND LEARNING METHODS

- Mini-CEX: Supervised history and clinical examination
- Case-based discussion
- Interactive lectures

## Heritable Diseases with Consequences for the Musculo-Skeletal System

**Objectives:** To understand epidemiology, pathogenesis, genetic susceptibility, clinical presentations, underlying aetiologies and treatment pathways of such disorders; to know when to refer to other relevant disciplines such as Orthopaedics, plastics surgery, pain management and members of the MDT; to understand relevance of co-morbid conditions for morbidity and mortality; to understand safety aspects and risk-benefit ratio of treatments; to understand the role of patient education in such disorders.

### KNOWLEDGE

1. Haemophilia and other bleeding disorders
2. Haemoglobinopathies
3. Heritable disorders of connective tissue
  - a. Osteogenesis imperfecta
  - b. Ehlers Danlos syndrome
  - c. Marfan's syndrome
  - d. Skeletal dysplasias
4. Hypermobility syndrome

### SKILLS

- Detailed and focussed history and examination
- Ability to recognise impact of heritable disorders on musculoskeletal presentations
- Understanding and application of knowledge in relation to co-morbid diseases
- Holistic approach to diagnosis and treatment
- Competence at diagnosing radiological features
- Understanding the role of focussed lab and radiological investigations

### ASSESSMENT AND LEARNING METHODS

- Mini-CEX: Supervised history, clinical examination and radiological interpretation
- Case-based discussion
- Interactive lectures

## Cancer and the Musculoskeletal System

Paraneoplastic presentations, tumours of bone and soft tissue,

**Objectives:** To understand epidemiology, pathogenesis and clinical features of musculoskeletal presentations of malignant disease; to understand epidemiology, pathogenesis, clinical presentations and treatment pathways of benign and malignant tumours of the musculoskeletal system.

### KNOWLEDGE

#### Paraneoplastic presentations of malignancy

- Definition
- Epidemiology
- Pathogenesis
- Clinical features
  - Rheumatological
  - Non-rheumatological
  - Risk factors and co-morbid diseases
- Investigations
  - Laboratory
  - Radiological: plain x-rays, scintigraphy, MRI, CT
- Management
  - Treatment options
  - Role of physiotherapy / occupational therapy

#### Tumours of bone and soft tissue; Bone tumours, cartilaginous tumours, Synovial tumours

- Definition: benign and malignant tumors of bone, cartilage, synovium, vascular and connective tissue
- Epidemiology
- Pathogenesis / genetics
- Clinical features
  - Rheumatological
  - Non-rheumatological
  - Risk factors and co-morbid diseases
  - Differentiating benign and malignant features
- Differential diagnosis
- Investigations
  - Laboratory
  - Radiological: plain x-rays, DXA
  - Genetic
- Management
  - When is 'observation' the correct approach?
  - Role of orthopaedics / plastics and reconstructive surgery
  - Role of physiotherapy / occupational therapy / psychology
  - Role of radiotherapy / chemotherapy

### KNOWLEDGE AS PER SPR YEAR

- Knowledge of paraneoplastic presentations of musculoskeletal disease: year 1
- Knowledge of benign and malignant tumors of bone and connective tissue: years 3 onwards

**SKILLS**

- Detailed and focussed history and examination
- Ability to recognise atypical and typical features of musculoskeletal presentations of malignancy
- Understanding and application of knowledge in relation to co-morbid diseases
- Holistic approach to diagnosis and treatment
- Competence at diagnosing radiological features of benign and malignant tumors
- Understanding the role of focussed lab and radiological investigations
- Understanding the role of chemotherapy, radiotherapy, rehabilitation medicine
- Knowledge of when observation is the correct approach

**ASSESSMENT AND LEARNING METHODS**

- Mini-CEX: Supervised history, clinical examination and radiological interpretation
- Case-based discussion
- Interactive lectures
- Interpretation of pathological features

## Paediatric Rheumatology

**Objectives:** To understand epidemiology, pathogenesis, genetic susceptibility, clinical presentations, underlying aetiologies and treatment pathways of paediatric arthritis; to know when to refer to other relevant disciplines such as Orthopaedics, plastics surgery, pain management and members of the MDT; to understand relevance of co-morbid conditions for morbidity and mortality; to understand safety aspects and risk-benefit ratio of treatments; to understand the role of patient / family education in paediatric arthritis.

### KNOWLEDGE

#### Paediatric rheumatology knowledge:

- Definition of above disorders
  - Diagnostic criteria
  - Epidemiology
  - Pathology /Pathogenesis / Genetics
  - Clinical features
  - Differential diagnosis
  - Investigations
  - Management
1. Juvenile idiopathic arthritis (JIA)
  2. Connective tissue disorders: Juvenile dermatomyositis and inflammatory myopathies, SLE, scleroderma / morphea, Kawasaki disease, Henoch-Schonlein purpura
  3. Congenital joint dysplasias; Developmental dysplasia of the hip, talipes equinovarus, achondroplasia, osteogenesis imperfect, osteopetrosis
  4. Regional syndromes: Transient synovitis of the hip, Perthes disease, Osgood Schlatter disease, chondromalacia patellae, slipped femoral epiphysis
  5. Other disorders; Hypermobility, Ehlers-Danlos syndrome, Marfan syndrome, Fibromyalgia
  6. Special factors pertaining to childhood arthritis

### SKILLS

- Detailed and focussed history and examination
- Ability to recognise atypical and typical features of musculoskeletal presentations in childhood
- Understanding and application of knowledge in relation to co-morbid diseases
- Holistic approach to diagnosis and treatment
- Competence at diagnosing radiological features of childhood arthritis
- Understanding the role of focussed lab and radiological investigations
- Understanding the role of other disciplines and rehabilitation medicine

### ASSESSMENT AND LEARNING METHODS

- Mini-CEX: Supervised history, clinical examination and radiological interpretation
  - Case-based discussion
- Interactive lectures

## Documentation of Minimum Requirements for Training

- These are the minimum number of cases you are asked to document as part of your training. It is recommended you seek opportunities to attain a higher level of exposure as part of your self-directed learning and development of expertise.
- You should expect the demands of your post to exceed the minimum required number of cases documented for training.
- If you are having difficulty meeting a particular requirement, please contact your specialty coordinator

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	Training Post	Personal Goals Form
<b>On Call Rota</b>	Desirable	1	Training Post	Clinical Activities
<b>Section 2 - Training Activities</b>				
<b>Outpatient Clinics</b>				Clinical Activities
General Rheumatology (minimum 2 per week)	Required	40	Training Programme	
Connective Tissue Disease	Desirable	25	Training Programme	
Early Arthritis	Desirable	25	Training Programme	
<b>Ward Rounds/Consultations</b>				Clinical Activities
Consultant Led (minimum 1 per week)	Desirable	50	Training Programme	
Consultations	Required	25	Training Programme	
<b>Emergencies/Complicated Cases</b> Diagnosis of nature of problem and its presentation, emergency case for investigation (minimum of 8 Rheumatology case per year)	Required	15	Training Programme	Cases
<b>Procedures/Practical Skills/Surgical Skills</b>				Procedures
Soft tissue injections	Required	15	Training Programme	
Joint aspiration and injection	Required	15	Training Programme	

Curriculum Requirement	Required/Desirable	Minimum Requirement	Reporting Period	Form Name
Microscopy	Desirable	10	Training Programme	
<b>Additional/Special Experience Gained (Desirable Experience)</b>	Desirable	1	Training Programme	Clinical Activities
<b>Laboratory Experience</b>	Desirable			Laboratory Activities
Immunology	Desirable	1	Training Programme	
Neurophysiology	Desirable	1	Training Programme	
<b>Relatively Unusual Cases</b>				Cases
Minimum of 30 cases to include:				
Systemic Vasculitis	Required	10	Training Programme	
Connective tissue disease	Required	10	Training Programme	
Unspecified multi-system disorders	Desirable	10	Training Programme	
<b>Ongoing management of Rheumatology patients</b>	Required	3	Training Programme	Cases
<b>Section 3 - Educational Activities</b>				
<b>Study Days</b>	Desirable	2	Training Programme	Study Day Attendance
<b>Attendance at Irish Society for Rheumatology Meeting</b>	Required	1	Training Programme	Additional Professional Experience
<b>In-house activities</b>				Attendance at Hospital Based Learning
Grand Rounds	Required	5	Training Programme	
Journal Clubs	Required	10	Year of Training	
MDT meetings	Required	10	Year of Training	
Radiology Conferences	Desirable	10	Training Programme	
Pathology Conferences	Desirable	10	Training Programme	

Curriculum Requirement	Required/Desirable	Minimum Requirement	Reporting Period	Form Name
<b>Formal Teaching Delivery</b>	Desirable	1	Training Programme	Delivery of Teaching
Lecture	Desirable	1	Training Programme	
Tutorial	Desirable	1	Training Programme	
Bed side Teaching	Desirable	1	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
<b>Publications</b>	Desirable	1	Training Programme	Additional Professional Experience
<b>Presentations</b>	Desirable	1	Training Programme	Additional Professional Experience
<b>Section 4 - Assessments</b>				
<b>CBD</b>	Required	2	Training Programme	CBD
<b>Mini-CEX</b>	Required	2	Training Programme	Mini-CEX
<b>Quarterly Assessments/End of Post Assessments</b>	Required	4	Year of Training	Quarterly Assessment/End of Post Assessment
<b>End of year Evaluation</b>	Required	1	Year of Training	End of year Evaluation