



**IRISH COMMITTEE
ON HIGHER
MEDICAL TRAINING**

ROYAL COLLEGE OF
PHYSICIANS OF IRELAND

HIGHER SPECIALIST TRAINING IN

GASTROENTEROLOGY



This curriculum of training in Gastroenterology was developed in 2010 and undergoes an annual review by Dr Claire Smyth and Dr Barbara Ryan National Specialty Directors, Dr Ann O’Shaughnessy, Head of Education, Innovation & Research and by the Gastroenterology Training Committee. The curriculum is approved by the Irish Committee on Higher Medical Training.

Version	Date Published	Last Edited By	Version Comments
6.0	2016	Hadas Levy	Changes made to minimum requirement document

Table of Contents

INTRODUCTION	5
AIMS.....	6
ENTRY REQUIREMENTS.....	7
DURATION & ORGANISATION OF TRAINING	8
FLEXIBLE TRAINING	9
TEACHING, RESEARCH & AUDIT.....	11
EPORTFOLIO	12
ASSESSMENT PROCESS.....	13
ANNUAL EVALUATION OF PROGRESS	14
FACILITIES	15
GENERIC COMPONENTS.....	16
STANDARDS OF CARE.....	17
DEALING WITH & MANAGING ACUTELY ILL PATIENTS IN APPROPRIATE SPECIALTIES.....	20
GOOD PROFESSIONAL PRACTICE	22
INFECTION CONTROL	24
THERAPEUTICS AND SAFE PRESCRIBING	26
SELF-CARE AND MAINTAINING WELL-BEING.....	28
COMMUNICATION IN CLINICAL AND PROFESSIONAL SETTING	30
LEADERSHIP	32
QUALITY IMPROVEMENT	34
SCHOLARSHIP.....	35
MANAGEMENT	36
SPECIALTY SECTION	38
UPPER GI TRACT	39
DYSPHAGIA, REFLUX AND NON-CARDIAC CHEST PAIN.....	39
UPPER ABDOMINAL PAIN/DYSPEPSIA	40
NAUSEA AND VOMITING	41
GASTRIC AND OESOPHAGEAL CANCERS	42
UPPER GASTROINTESTINAL BLEEDING	43
CLINICAL AND LABORATORY TESTS OF GI STRUCTURE AND FUNCTION	44
ABSORPTION AND NUTRITION	45
MALABSORPTION, ANOREXIA AND WEIGHT LOSS.....	45
SHORT BOWEL SYNDROME AND ILEOSTOMY	46
EVALUATION OF ANAEMIA.....	47
NUTRITIONAL SUPPORT	48
ABDOMINAL PAIN.....	49
CONSTIPATION, DIARRHOEA OR CHANGE IN BOWEL HABIT	50
RECTAL BLEEDING AND PERIANAL FISTULAE	51
COLORECTAL CANCER	52
LIVER	53
ASSESSMENT OF LIVER FUNCTION	53
JAUNDICE.....	54
HEPATOSPLENOMEGALY.....	55
ASCITES AND OTHER ABDOMINAL SWELLINGS	56
LIVER FAILURE AND ENCEPHALOPATHY.....	57
SUB-SPECIALTY TRAINING IN HEPATOLOGY (ADVANCED LIVER SUB-SPECIALTY TRAINING OPTION).....	58
ENDOSCOPY TRAINING MODULE.....	60
REQUIREMENTS FOR TRAINERS	62
INTRODUCTION	63
GENERIC SKILLS IN GASTROINTESTINAL ENDOSCOPY	65
GENERAL TRAINING.....	67
UPPER GASTROINTESTINAL ENDOSCOPY/OGD	67
THERAPEUTIC OGD	69

UPPER GASTROINTESTINAL BLEEDING	69
LOWER GASTROINTESTINAL ENDOSCOPY	70
THERAPEUTIC TECHNIQUES	72
SUMMARY OF ENDOSCOPY CURRICULUM	75
DOCUMENTATION OF MINIMUM REQUIREMENTS FOR TRAINING	76

Introduction

A trainee in Gastroenterology must have expertise in the management and diagnosis of disease of the gastrointestinal tract, liver and pancreas and be competent in the diagnosis, and treatment of intra abdominal malignancy. Proficiency in diagnostic and therapeutic upper and lower endoscopy is also essential.

During training for basic proficiency it is envisaged that trainees may develop subspecialty expertise which would include pancreatobiliary disease, ERCP, advanced Hepatology IBD, functional bowel disease and nutrition.

Trainees will be required to develop skills in both diagnostic and therapeutic endoscopy. These endoscopic procedures within the core training programme will include oesophago-gastro-duodenoscopy and full colonoscopy. Therapeutic skills would include oesophageal stricture dilatation, injection or banding of varices, the insertion of gastrostomy feeding tubes and colonoscopic polypectomy. **The minimum numbers of procedures recommended for adequate training are outlined in the Minimum Requirements Section.**

Aims

Upon satisfactory completion of specialist training in Gastroenterology a doctor will be **competent** to undertake comprehensive medical practice in that specialty in a **professional** manner, unsupervised and independently and/or within a team, in keeping with the needs of the healthcare system.

Competencies, at a level consistent with practice in the specialty of Gastroenterology 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.
- The ability to function as a supervisor, trainer and teacher in relation to colleagues, medical students and other health professionals.
- Capability to be a scholar, contributing to development and research in the field of Gastroenterology.
- Professionalism.
- Knowledge of public health and health policy issues: awareness and responsiveness in the larger context of the health care system, including e.g. the organisation of health care, partnership with health care providers and managers, the practice of cost-effective health care, health economics and resource allocations.
- Ability to understand health care and identify and carry out system-based improvement of care

Professionalism

Being a good doctor is more than technical competence. It involves values – putting patients first, safeguarding their interests, being honest, communicating with care and personal attention, and being committed to lifelong learning and continuous improvement. Developing and maintaining values are important; however, it is only through putting values into action that doctors demonstrate the continuing trustworthiness with the public legitimately expect. According to the Medical Council, Good Professional Practice involves the following aspects:

- Effective communication
- Respect for autonomy and shared decision-making
- Maintaining confidentiality
- Honesty, openness and transparency (especially around mistakes, near-misses and errors)
- Raising concerns about patient safety
- Maintaining competence and assuring quality of medical practice

Entry Requirements

Applicants for Higher Specialist Training (HST) in Gastroenterology must have a certificate of completion in Basic Specialist Training (BST) in General Internal Medicine and obtained the MRCPI.

BST should consist of a minimum of 24 months involved with direct patient care supervised by senior clinicians and based on a clinical curriculum and professional and ethical practice learnt through mentorship by senior clinicians and supported by RCPI's mandatory courses.

BST in General Internal Medicine (GIM) is defined as follows:

- A minimum of 24 months in approved posts, with direct involvement in patient care and offering a wide range of experience in a variety of specialties.
- At least 12 of these 24 months must be spent on a service or services in which the admissions are acute and unselected.
- Assessment of knowledge and skills gained by each trainee during their clinical experience. This assessment takes place in the form of the mandatory MRCPI examination (*The MRCPI examination was introduced as mandatory for BST as of July 2011)
- For further information please review the BST curriculum

Those who do not hold a BST certificate and MRCPI must provide evidence of equivalency.

Entry on the training programme is at year 1. Deferrals are not allowed on entry to Higher Specialist Training.

Duration & Organisation of Training

The duration of HST in Gastroenterology and General Internal Medicine is five years, one year of which **may** be gained from a period of full-time research.

For further information on dual training in General Internal Medicine please refer to the GIM Curriculum on our website www.rcpi.ie

HST will provide experience in both teaching hospitals (or other major centres with academic activity) and regional hospitals. The posts within the programme to which the trainee is appointed will have named consultant trainers. In addition, one consultant will act as a Programme Director who will co-ordinate the training and report to the National Specialty Director for Gastroenterology, appointed by the ICHMT.

Essential Training: Trainees must attend study days as advised by the National Specialty Director.

The Conjoint Board of the Royal College of Physicians of Ireland (RCPI) and the Royal College of Surgeons in Ireland (RCSI) oversee training in Endoscopy in Ireland for SpRs who are registered on a RCPI or RCSI Higher Specialist Training (HST) programme.

Trainees are expected to complete their endoscopic training within a 5 year period while registered on a HST programme. Accreditation will be awarded at two levels: General and Specialist level.

Procedure requirements for General Training:

The following requirements must be met for General level of training:

- Upper gastrointestinal endoscopy:
 - perform at least 200 unassisted and completed examinations independently under supervision.
 - a minimum of 20 therapeutic procedures excluding polypectomy; of these 10 must involve control of upper gastrointestinal haemorrhage.
 - DOPS assessments annually at 1 month, 6 months and at end of year. Additional DOPS assessments may be required at the discretion of the trainer
- Colonoscopy:
 - perform a minimum of 200 unassisted, supervised, complete colonoscopies to the caecum in patients with intact colons (i.e. no previous colonic resection)
 - perform snare polypectomies in a minimum of 30 patients.
 - achieve at least a 90% caecal intubation rate by the completion of training

For further details see the Endoscopy module in the Speciality section of the curriculum.

While no particular order or sequence of training will be imposed and programmes offered should be flexible i.e. capable of being adjusted to meet trainees' needs, trainees must spend the first two years of training in clinical posts in Ireland before undertaking any period of research or out of programme clinical experience (OCPE). The earlier years will usually be directed towards acquiring a broad general experience of Gastroenterology under appropriate supervision. An increase in the content of hands-on experience follows naturally, and, as confidence is gained and abilities are acquired, the trainee will be encouraged to assume a greater degree of responsibility and independence.

If an intended career path would require a trainee to develop further an interest in a sub-specialty within Gastroenterology (e.g. hepatology, ERCP etc.), this should be accommodated as far as possible within the training period, re-adjusting timetables and postings accordingly.

“Generic” knowledge, skills and attitudes support competencies which are common to good medical practice in all the medical and related specialties. It is intended that all Specialist Registrars should re-affirm those competencies during Higher Specialist Training. No time-scale of acquisition is offered, but failure to make progress towards meeting these important objectives **at an early stage** would cause concern about a SpR's suitability and ability to become independently capable as a specialist.

Flexible Training

National Flexible Training Scheme – HSE NDTP

The HSE NDTP operates a National Flexible Training Scheme which allows a small number of Trainees to train part time, for a set period of time.

Overview

- Have a well-founded reason for applying for the scheme e.g. personal family reasons
- Applications may be made up to 12 months in advance of the proposed date of commencement of flexible training and no later than 4 months in advance of the proposed date of commencement
- Part-time training shall meet the same requirements as full-time training, from which it will differ only in the possibility of limited participation in medical activities to a period of at least half of that provided for full-time trainees

Job Sharing - RCPI

The aim of job sharing is to retain doctors within the medical workforce who are unable to continue training on a full-time basis.

Overview

- A training post can be shared by two trainees who are training in the same specialty and are within two years on the training pathway
- Two trainees will share one full-time post with each trainee working 50% of the hours
- Ordinarily it will be for the period of 12 months from July to July each year in line with the training year
- Trainees who wish to continue job sharing after this period of time will be required to re-apply
- Trainees are limited to no more than 2 years of training at less than full-time over the course of their training programme

Post Re-assignment – RCPI

The aim of post re-assignment is to support trainees who have had an unforeseen and significant change in their personal circumstances since the commencement of their current training programme which requires a change to the agreed post/rotation.

Overview:

- Priority will be given to trainees with a significant change in circumstances due to their own disability, it will then be given to trainees with a change in circumstances related to caring or parental responsibilities. Any applications received from trainees with a change involving a committed relationship will be considered afterwards
- If the availability of appropriate vacancies is insufficient to accommodate all requests eligible trainees will be selected on a first come, first serve basis

For further details on all of the above flexible training options, please see the Postgraduate Specialist Training page on the College website www.rcpi.ie

Training Programme

The training programme offered will provide opportunities and fulfil all the requirements of the curriculum of training for Gastroenterology in accredited training hospitals. Each post within the programme will have a named trainer/educational supervisor and programmes will be under the direction of the National Specialty Director for Gastroenterology or, in the case of GIM, the Regional Specialty Advisor. Programmes will be as flexible as possible consistent with curricular requirements, for example to allow the trainee to develop a sub-specialty interest.

The experience gained through rotation around different departments is recognised as an essential part of HST. A Specialist Registrar may **not** remain in the same unit for longer than 2 years of clinical training; or with the same trainer for more than 1 year.

Where an essential element of the curriculum is missing from a programme, access to it should be arranged, by day release for example, or if necessary by secondment.

Teaching, Research & Audit

All trainees are required to participate in teaching. They should also receive basic training in research methods, including statistics, so as to be capable of critically evaluating published work.

A period of supervised research relevant to Gastroenterology is considered highly desirable and will contribute up to 12 months towards the completion of training. Some trainees may wish to spend two or three years in research leading to an MSc, MD, or PhD, by stepping aside from the programme for a time. For those intending to pursue an academic path, an extended period of research may be necessary in order to explore a topic fully or to take up an opportunity of developing the basis of a future career. Such extended research may continue after the CSCST is gained. However, those who wish to engage in clinical medical practice must be aware of the need to maintain their clinical skills during any prolonged period concentrated on a research topic, if the need to re-skill is to be avoided.

Trainees are required to engage in audit during training and to provide evidence of having completed the process.

ePortfolio

The trainee is required to keep their ePortfolio up to date and maintained throughout HST. The ePortfolio 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 Curriculum. This will remain the property of the trainee and must be produced at the annual Evaluation meeting.

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. Trainees must co-operate with other stakeholders in the training process. It is in a SpR's own interest to maintain contact with the Medical Training Department and Dean of Postgraduate Specialist Training, and to respond promptly to all correspondence relating to training. "Failure to co-operate" will be regarded as, in effect, withdrawal from the HST's supervision of training.

At the annual Evaluation, the ePortfolio will be examined. The results of any assessments and reports by educational supervisors, together with other material capable of confirming the trainee's achievements, will be reviewed.

Assessment Process

The methods used to assess progress through training must be valid and reliable. The Gastroenterology Curriculum has been re-written, describing the levels of competence which can be recognised. The assessment grade will be awarded on the basis of direct observation in the workplace by consultant supervisors. Time should be set aside for appraisal following the assessment e.g. of clinical presentations, case management, observation of procedures. As progress is being made, the lower levels of competence will be replaced progressively by those that are higher. Where the grade for an item is judged to be deficient for the stage of training, the assessment should be supported by a detailed note which can later be referred to at annual review. The assessment of training may utilise the Mini-CEX, DOPS and Case Based Discussions (CBD) methods adapted for the purpose. These methods of assessment have been made available by HST for use at the discretion of the NSD and nominated trainer. They are offered as a means of providing the trainee with attested evidence of achievement in certain areas of the Curriculum e.g. competence in procedural skills, or in generic components. Assessment will also be supported by the trainee's portfolio of achievements and performance at relevant meetings, presentations, audit, in tests of knowledge, attendance at courses and educational events.

Annual Evaluation of Progress

Overview

The HST Annual Evaluation of Progress (AEP) is the formal method by which a trainee's progression through her/his training programme is monitored and recorded each year. The evidence to be reviewed by the panel is recorded by the trainee and trainer in the trainee's e-Portfolio.

There is externality in the process with the presence of the National Specialty Director (NSD), a Chairperson and an NSD Forum Representative. Trainer's attendance at the Evaluation is mandatory, if it is not possible for the trainer to attend in person, teleconference facilities can be arranged if appropriate. In the event of a penultimate year Evaluation an External Assessor, who is a consultant in the relevant specialty and from outside the Republic of Ireland will be required.

Purpose of Annual Evaluation

- Enhance learning by providing formative Evaluation, enabling trainees to receive immediate feedback, measure their own performance and identify areas for development;
- Drive learning and enhance the training process by making it clear what is required of trainees and motivating them to ensure they receive suitable training and experience;
- Provide robust, summative evidence that trainees are meeting the curriculum standards during the training programme;
- Ensure trainees are acquiring competencies within the domains of Good Medical Practice;
- Assess trainees' actual performance in the workplace;
- Ensure that trainees possess the essential underlying knowledge required for their specialty;
- Inform Medical Training, identifying any requirements for targeted or additional training where necessary and facilitating decisions regarding progression through the training programme;
- Identify trainees who should be advised to consider a change in career direction.

Structure of the Meeting

The AEP panel speaks to the trainee alone in the first instance. The trainee is then asked to leave the room and a discussion with the trainer follows. Once the panel has talked to the trainer, the trainee is called back and given the recommendations of the panel and the outcome of the AEP.

At the end of the Evaluation, all panel members and the Trainee agree to the outcome of the Evaluation and the recommendations for future training. This is recorded on the AEP form, which is then signed electronically by the Medical Training Coordinator on behalf of the panel and trainee. The completed form and recommendations will be available to the trainee and trainers within their ePortfolio.

Outcomes

- Trainees whose progress is satisfactory will be awarded their AEP
- Trainees who are being certified as completing training receive their final AEP
- Trainees who need to provide further documentation or other minor issues, will be given 2 weeks (maximum 8) from the date of their AEP to meet the requirements. Their AEP outcome will be withheld until all requirements have been met.
- Trainees who are experiencing difficulties and/or need to meet specific requirements for that year of training will not be awarded their AEP. A date for an interim AEP will be decided and the trainee must have met all the conditions outlined in order to be awarded their AEP for that year of training. The "Chairperson's Overall Assessment Report" will give a detailed outline of the issues which have led to this decision and this will go the Dean of Postgraduate Specialist Training for further consideration.
- Trainees who fail to progress after an interim Evaluation will not be awarded their AEP.

The Dean of Postgraduate Training holds the final decision on AEP outcomes. Any issues must be brought to the Dean and the Annual Chairperson's Meeting for discussion.

Facilities

A consultant trainer/educational supervisor has been identified for each approved post. He/she will be responsible for ensuring that the educational potential of the post is translated into effective training which is being fully utilised. The training objectives to be secured should be agreed between 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.

All training locations approved for HST have been inspected by the medical training department. Each must provide an intellectual environment and a range of clinical and practical facilities sufficient to enable the knowledge, skills, clinical judgement and attitudes essential to the practice of Gastroenterology to be acquired.

Physical facilities include the provision of sufficient space and opportunities for practical and theoretical study; access to professional literature and information technologies so that self-learning is encouraged and data and current information can be obtained to improve patient management.

Trainees in Gastroenterology should have access to an educational programme of e.g. lectures, demonstrations, literature reviews, multidisciplinary case conferences, seminars, study days etc, capable of covering the theoretical and scientific background to the specialty. Trainees should be notified in advance of dates so that they can arrange for their release. For each post, at inspection, the availability of an additional limited amount of study leave for any legitimate educational purpose has been confirmed. Applications, supported if necessary by a statement from the consultant trainer, will be processed by the relevant employer.

Generic Components

This chapter covers the generic components which are relevant to HST 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 HST trainees with differing application levels in practice.

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
- Knowledge of the procedure for the 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, strategies applicable to smoking, alcohol, drug abuse, lifestyle changes
- 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
- The need and place for specific types of notes e.g. problem-orientated discharge, letters, concise out-patient reports
- 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
- Ability to enlist patients' involvement in solving their health problems, providing information, education
- Availing of support provided by voluntary agencies and patient support groups, as well as expert services e.g. detoxification / psychiatric services
- Valuing contributions of health education and disease prevention to health in a community
- Compiling adequate case notes, with 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)
- 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
- 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 tool (e.g. ISBAR)

ASSESSMENT & LEARNING METHODS

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

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
- Disclosure – know 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 according to Data Protection Act 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)

- When and how to report a near miss or adverse event
- Knowledge of preventing and managing near misses and adverse events. 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

- The importance of patient safety relevance in health care setting
- Standardising common processes and procedures – checklists, vigilance
- The multiple factors involved in failures
- Safe healthcare systems and provision of a safe working environment
- The relationship between ‘human factors’ and patient safety
- Safe working practice, role of procedures and protocols in optimal practice
- How to minimise incidence and impact of adverse events
- 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

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
- Ability to learn from errors and near misses to prevent future errors
- Using relevant information from complaints, incident reports, litigation and quality improvement reports in order to control risks
- Minimising errors during invasive procedures by developing and adhering to best-practice guidelines for safe surgery
- Minimising medication errors by practicing safe prescribing principles
- Using the Open Disclosure Process Algorithm
- Managing errors and near-misses
- Managing complaints
- Ethical and legal decision making skills

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
- Patient Safety (on-line) – recommended
- RCPI HST Leadership in Clinical Practice
- Quality improvement methodology course - recommended
- RCPI Ethics programmes (I-IV)
- Medical Council Guide to Professional Conduct and Ethics
- Reflective learning around ethical dilemmas encountered in clinical practice

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 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 infectious disease requiring notification
- In surgery or during an invasive procedure, understanding the increased risk of infection in these patients 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

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
- Good Clinical Practice guidelines for seeing and managing patients who are on clinical research trials

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
- Taking a history of drug allergy and 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
- Principles of Antibiotics Use (on-line) – recommended
- Guidance for health and social care providers - Principles of good practice in medication reconciliation (HIQA)

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 knowledge – understand own psychological strengths and limitations
- Understand how own personality characteristics (such as need for approval, judgemental tendencies, needs for perfection and control) affect relationships with patients and colleagues
- 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 for specific patients
- 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 (love, anger, frustration, vulnerability, intimacy, etc) in “easy” and difficult 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
- Ethics courses
- RCPI HST Leadership in Clinical Practice course
- RCPI Physician Wellbeing and Stress Management
- RCPI Building Resilience in a Challenging Work Environment

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, knowing how and when to break bad news, how to negotiate cultural, language barriers, dealing with sensory or psychological and/or intellectual impairments, how to deal with challenging or aggressive behaviour
- How to communicate essential information where difficulties exist, how to appropriately utilise the assistance of interpreters, chaperones, and relatives.
- How to deal with anger, 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 concise, problem-orientated statement of facts and opinions (written, verbal or electronic)
- Knowledge of legal context of status of records and reports, of data protection (confidentiality), Freedom of Information (FOI) issues
- Understanding of the relevance to continuity of care and the importance of legible, accessible, records
- Knowing when urgent contact becomes necessary and the appropriate place for verbal, telephone, electronic, 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 to outcome of continuity of care, within and between phases of healthcare management
- The importance of completion of tasks and documentation (e.g. before handover to another team, department, specialty), of identifying outstanding issues and uncertainties
- Knowledge of the required attitudes, skills and behaviours which facilitate continuity of care such as maintaining (legible) records, 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, retain attention avoid 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 risks of information overload
- Interpreting results, significance of findings, diagnosis, explaining objectives, limitations, risks of treatment, using communication adjusted to recipients' ability to comprehend
- Ability to achieve level of understanding necessary to gain co-operation (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, assistance available
- The importance of obtaining and recording accurate and full information, seeking confirmation from multiple sources
- Knowledge of how to establish facts, identifying issues and responding quickly and appropriately to a complaint received

SKILLS

- Ability to elicit facts, using a mix of open and closed-ended questions appropriately
- 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 (and attempting to reach) realistic objectives, identifying and prioritising outstanding problems
- Using language, literature (leaflets) diagrams, educational aids and resources appropriately
- Ability to 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
- Ethics courses
- 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 – An Introduction
- Effective Teaching and Supervising Skills course (online) - recommended
- Educational Assessment Skills course - recommended
- Performing audit 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 course
- RCPI HST Leadership in Clinical Practice
- Annual audit
- Consultant feedback on management and leadership skills
- Involvement in hospital committees

Specialty Section

Upper GI Tract

Objective: To be capable of evaluating the significance of symptoms referable to the upper GI tract and providing effective management of patients

Dysphagia, Reflux and Non-Cardiac Chest Pain

Objective: To be capable of assessing the significance of symptoms such as dysphagia and retrosternal pain, and arranging appropriate investigations with a view to providing effective management

KNOWLEDGE

- Physiology of swallowing and reflux; benign and malignant causes and presentation of dysphagia and its management
- Physiology of oesophagus and gastro-oesophageal junction; gastro-oesophageal reflux disease including symptoms (e.g. heartburn) and endoscopic finding;
- Management of Barrett's oesophagus
- Diagnosis and treatment of non-cardiac chest pain

SKILLS

- Elicit history, investigate appropriately and define medical endoscopic, radiological and surgical treatment strategies
- Recognise symptom complex, arrange appropriate investigations including Ph monitoring, motility studies and endoscopy and interpret findings

ASSESSMENT & LEARNING METHODS

- Case Based Discussion (CBD)
- Mini-CEX

Upper Abdominal Pain/Dyspepsia

Objective: To be able to assess the significance of symptoms of upper abdominal pain and dyspepsia and arrange for appropriate investigation, with a view to providing effective management

KNOWLEDGE

Peptic ulcer and non-ulcer dyspepsia:

- Physiology of gastric acid secretion;
- Role of *Helicobacter pylori* and its detection and treatment
- Effect of aspirin non-steroidal anti-inflammatory drugs and drugs which inhibit gastric acid production and stimulate mucosal protection
- Can describe physiology of motor disorders of upper GI Tract including achalasia and diffuse oesophageal spasm
- Demonstrates willingness to manage dyspeptic patients appropriately

Gall bladder disease:

- Physiology of bile, gallstone formation, biliary colic and gall bladder neoplasia
- Demonstrates willingness to investigate, treat and refer to surgeons/radiologists as appropriate

Pancreatic disease:

- Physiology of pancreatic function, recognition of pancreatic pain and/or insufficiency
- Recognises and demonstrates willingness to assess and fully investigate symptoms of pancreatic disease, pancreatic function and structure and to refer appropriately

SKILLS

- Be able to identify appropriate investigations, make differential diagnosis, identify success of treatment and recognise complications such as gastric outlet obstruction, perforation and bleeding
- Be able to diagnose and treat dysmotility type symptoms
- Be able to recognise gall bladder symptoms and signs, investigate appropriately and instigate medical or surgical treatment
- Approved investigation of pancreatic structure and function, institute medical/surgical management

ASSESSMENT & LEARNING METHODS

- Mini-CEX
CBD

Nausea and Vomiting

Objective: To be able to assess the significance of symptoms such as dyspepsia, nausea and vomiting in relation to disease of the GI tract, to investigate them appropriately and to manage patient's with these symptoms effectively and safely

KNOWLEDGE

- Non-organic causes of upper GI symptoms and their management
- Nausea, vomiting occurring in GI diseases
- Metabolic and neurological causes of nausea and vomiting as a manifestation of systemic disease
- Demonstrates a willingness to manage upper gastrointestinal symptoms appropriately

SKILLS

- Diagnose and manage upper gastrointestinal symptoms
- Be able to diagnose functional disorders and initiate symptomatic treatment
- Be able to apply the wide differential diagnosis applicable to these symptoms

ASSESSMENT & LEARNING METHODS

- Mini-CEX
- Case presentations
- CBD

Gastric and Oesophageal Cancers

Objective: To be competent to recognize presenting features of upper GI cancers and to obtain evidence to confirm the diagnosis: to advise and initiate treatment which is appropriate to the patient's needs

KNOWLEDGE

- Pathology (types) pathogenesis, clinical, radiological features, complications, medical and surgical options, palliative care, prognosis
- Communication with patients and their relatives and with colleagues e.g. in breaking bad news, in a multidisciplinary approach
- Appreciate potential value of contributions from colleagues and other health professionals
- Acknowledge patients' right to be involved in decisions

SKILLS

- Assess, investigate and stage upper GI cancers and make appropriate decisions regarding treatment modalities

ASSESSMENT & LEARNING METHODS

- Case presentations
- CBD

Upper Gastrointestinal Bleeding

Objective: To be competent to determine the cause and deal with the effects of acute and chronic bleeding from sources in the upper GI tract such as hiatus hernia, peptic ulcer, varices, tumours and vascular abnormalities

KNOWLEDGE

Assessment and management of patients with upper GI bleeding

- Knowledge of risk factors for death, pathophysiology of shock and its measurement, resuscitation
- Pathophysiology of arterial bleeding in PUD, endoscopic and radiological diagnosis of PUD, endoscopic and surgical elements treatments for PUD
- Anatomy and physiology of varices, risk factors for bleeding including size, portal pressure and endoscopic stigmata, coagulation abnormalities
- Clinical features of vascular anomalies and tumours and risks of bleeding
- Demonstrates willingness to recognise severity of condition and take prompt action as necessary
- Demonstrates willingness to recommend prompt endoscopic action and liaise with surgical colleagues as necessary
- Demonstrates willingness to participate in management of variceal haemorrhage and liaise with a specialist liver unit for TIPS or other measures when necessary
- Demonstrates willingness to participate in endoscopic management

SKILLS

- Diagnose and manage upper gastrointestinal bleeding
- Recognise, assess and manage shocked patients adequately
- Recommend urgent endoscopy for diagnosis and treatment of bleeding peptic ulcer
- Recommend use of endoscopic therapy when necessary and administer prophylactic treatments and vasoconstrictor agents as necessary for bleeding varices
- *Undertake endoscopic diagnosis and recommend treatment with thermal or other methods as appropriate for bleeding from vascular anomalies

ASSESSMENT & LEARNING METHODS

- Mini-CEX
- CBD

Clinical and Laboratory Tests of GI Structure and Function

Objective: To be competent in the selection, application and correct interpretation of tests of GI structure and their function which are appropriate to the patient's needs

KNOWLEDGE

Oesophageal, gastric & anorectal function:

- Knowledge of oesophageal pH monitoring, oesophageal and anorectal motility/manometry, gastric emptying studies
- Be able to recommend use in suitable patients: able to explain and obtain informed consent
- Demonstrates willingness to use tests when necessary and appropriate: and to respond to patient's rights to be fully informed

Gastric secretion:

- Can discuss 24-hour intragastric H⁺ concentration, maximal acid output, effect of pentagastrin and gastrin releasing peptide
- Be able to recognise value for drug testing and research and evaluate results
- Appreciates the need to fully inform patients concerning procedure and obtain consent

Tests for malabsorption:

- Can describe SeHCAT, PABA, lactose tolerance test, H₂ breath test, faecal elastase
- Be able to recommend use of and interpret results of tests
- Willing to discuss procedure and value of results with patients

Tests for inflammation

- Can describe serological and nuclear medicine testing including Tc WBC scans
- Be able to make appropriate use of as indicated
- Willing to discuss procedure and value of results with patients

Radiological evaluation

- Can interpret plain x-rays of abdomen, barium studies of GI tract CT, MRI and ultrasound, endoscopic ultrasound (EUS),
- Demonstrates competency in ordering ultrasounds, viewing the images and aiding the interpretation with radiologists
- Be able to recommend use of tests and interpret results
- Demonstrates willingness to explain the procedure, any risks and the results with the patient
- Respects patient's right to fully understand purpose and outcome

Histopathological evaluation

- Has knowledge of the histological features of common gastroenterology and liver diseases
- Can appreciate the histological findings in discussion with histopathologists

SKILLS

- Recommend and Interpretation of GI tests
- Informed consent

ASSESSMENT & LEARNING METHODS

- Mini-CEX
- Study day (Held every 2nd year)

Absorption and Nutrition

Objective: To understand the anatomy and physiology of digestion and intestinal absorption, and the pathological processes that may interfere To be competent to recognise, assess and manage the underlying cause, and of providing an appropriate response to the patient's needs

Malabsorption, Anorexia and Weight Loss

Objective: To be able to recognise the potential significance of steatorrhoea and other features of malabsorption, anorexia and weight loss; to investigate the cause and to plan management which is appropriate

KNOWLEDGE**Steatorrhoea:**

- Can define the physiology of absorption and pathophysiology of malabsorption
- Understand causes including parasites, coeliac disease, bacterial overgrowth, Crohn's disease, chronic pancreatitis and neoplasia
- Be able to recognise symptom patterns, investigate with barium studies, EUS and endoscopy, microbiological and biochemical tests, and give appropriate treatment
- Demonstrates willingness to recognise and treat small intestinal, pancreatic and other disorders and understand patients' needs

Anorexia and weight loss

- Differential diagnosis including GI and non-GI causes; knowledge of eating disorders
- Be able to arrange investigation, recognise organic from non-organic causes, and plan treatment accordingly
- Demonstrates willingness to explain potential causes and management with patient

SKILLS

- Diagnose and manage patients with malabsorption, anorexia and weight loss

ASSESSMENT & LEARNING METHODS

- Mini-CEX
- CBD

Short Bowel Syndrome and Ileostomy

Objective: To understand the fluid, electrolyte and metabolic consequences and to be capable of providing appropriate supporting measures

KNOWLEDGE

- Can explain fluid and electrolyte balance and its maintenance, can identify malnutrition and micronutrient deficiency, causes of short bowel syndrome, can discuss role of stomatherapy
- Be able to detect fluid and electrolyte deficiency, investigate malnutrition appropriately, and plan treatment
- Demonstrates willingness to manage and refer patients appropriately

SKILLS

- Knowledge of short bowel syndrome and ileostomy
- Performance of ileostomy

ASSESSMENT & LEARNING METHODS

- Clinical presentations
- CBD
- DOPS –see endoscopy curriculum
- Year 3 - 4: Performance of ileostomy

Evaluation of Anaemia

Objective: To recognise different types of anaemia, understand their pathogenesis and be capable of determining the cause and arranging treatment

KNOWLEDGE

Anaemias, diagnosis and management

- Definition and types including bone marrow disorders and haemolysis
- For iron deficiency anaemia, demonstrate knowledge of iron metabolism, absorption and bioavailability, iron stores, red cell indices, iron absorption, physiological and GI causes of iron losses
- For macrocytic anaemia, demonstrate knowledge of B12 and folate metabolism, absorption or malabsorption, pernicious anaemia, ileal disorders, alcoholism
- Demonstrates willingness to investigate and treat anaemia associated GI disease appropriately

SKILLS

- Diagnosis and management of anaemia
- Be able to recognise anaemia and possible causes
- Be able to recognise iron deficiency, plan appropriate GI investigations, and give necessary treatment
- Be able to recognise causes of macrocytic anaemia, confirm by investigation and take necessary action

ASSESSMENT & LEARNING METHODS

- Mini-CEX
- Clinical presentations
- CBD

Nutritional Support

Objective: To understand energy homeostasis, under nutrition and be capable of determining nutritional status, applying that knowledge and appropriate skills to providing additional nutritional support, when that is in the patients' best interests

KNOWLEDGE

Nutritional assessment and support

- Can describe body composition, energy homeostasis, consequences of under nutrition, screening
- Can evaluate the type of food available and routes of administration, use of intravenous nutrition and its complications, enteral feeding nasogastric and jejunal administration
- Demonstrates willingness to assess nutritional needs and involve nutritional support team

PEG

- Can identify and describe ethics and indications; anatomy of relevant area, types of PEG tubes, disadvantages and complications
- Be able to recommend and insert PEG feeding when appropriate and supervise follow up care
- Demonstrates willingness to consider PEG support in appropriate cases and listen to relatives' fears and expectations

Obesity

- Can describe the risks of obesity, and evaluate the measurement tools
- Is aware of the dietary, pharmacological, surgical methods of treatment and can refer to obesity service when appropriate

SKILLS

- Assess nutritional status
- Be able to detect under nutrition and apply knowledge to individual patients
- Be able to choose appropriate route for nutritional support, insert appropriate feeding lines, supervise their use and prescribe appropriate IV and enteral feeding regime
- Recommend and insert PEG feeding
- Recognises obesity as an illness and will treat patient in sympathetic manner

ASSESSMENT & LEARNING METHODS

- Mandatory Nutrition Course
- DOPS: Insertion of PEG
- Case presentations
- CBD

Abdominal Pain

Objective: To be able to differentiate the various causes of acute, recurrent and chronic abdominal pains; to arrange and interpret investigations appropriately and interpret the results and to recommend treatment

KNOWLEDGE

Acute and chronic abdominal pain

- Pathophysiology of organ specific causes including biliary colic, hollow viscus obstruction, pancreatitis and non-GI causes (renal colic)
- Pathophysiology of Crohn's disease, diverticulitis; intra abdominal neoplasia and pancreatitis (acute and chronic)
- Knowledge of analgesics (administration and safety), medical and surgical nerve blocks
- Be able to investigate abdominal pain appropriately, construct differential diagnosis
- Demonstrates willingness to understand physical and mental responses to pain and its causes
- Demonstrates willingness to treat and refer to surgeons, psychiatrists, pain clinics and palliative care teams as necessary
- Demonstrate ability to confidently diagnose functional abdominal disorders and pain using criteria such as the Rome or Manning criteria and to avoid over investigation,
- Demonstrate ability to explore successfully the emotional and psychological backgrounds of patients with functional bowel disorders and to liaise with and/or refer to psychiatrists as necessary

SKILLS

- Investigate and manage abdominal pain
- Be able to elicit and interpret abdominal signs including an acute abdomen, order investigations correctly and recommend medical or surgical treatment
- Be able to treat abdominal pain appropriately for individual patients with different disease processes

ASSESSMENT & LEARNING METHODS

- Mini-CEX
- Clinical presentations,
- CBD

Constipation, Diarrhoea or Change in Bowel Habit

Objective: To recognise symptoms of colonic dysfunction and be able to differentiate between the potential causes using appropriate examinations and investigations, in order to arrange or recommend treatment

KNOWLEDGE

Constipation and diarrhoea

- Knowledge of physiology and motility of normal colon
- Knowledge of the role of dietary fibre in influencing colonic function and motility
- Causes of obstructed defecation; Hirschsprung's
- Identifies infective diarrhoea (viral, bacterial and protozoal) from secretory and osmotic diarrhoea (inflammatory bowel disease, neoplasia)
- Knowledge of presentation and appropriate investigation of intestinal ischaemia, neoplastic and infiltrative disorders
- Medical and surgical options for treatment of ulcerative and Crohn's colitis, use of and safety issues of antimicrobials, anti diarrhoeals, immune modulators and biological therapies
- Demonstrates willingness to investigate and counsel as appropriate
- Demonstrates willingness to appreciate discomfort associated with diarrhoea and incontinence and take sympathetic action
- Demonstrates willingness to consult with surgical colleagues when necessary

Change in bowel habit

- Can discuss functional disorders of colon, spurious diarrhoea, autonomic disorders, laxative abuse, diverticulosis and malignancy
- Ability to order and interpret investigations and give appropriate specific or symptomatic treatment including use of antispasmodics, dietary fibre and constipating agents
- Demonstrates sympathy and willingness to treat as appropriate

SKILLS

- Investigate when necessary and advise on use of diet, laxatives and biofeedback as necessary
- Investigate with blood tests, stool examination, endoscopy and radiology as appropriate
- Assess severity of disease, take necessary action and liaise with surgical colleagues

ASSESSMENT & LEARNING METHODS

- Mini-CEX
- Clinical presentations
- CBD
- DOPS – colonoscopic competency (see endoscopic curriculum)

Rectal Bleeding and Perianal Fistulae

Objective: To appreciate the importance of rectal bleeding as a symptom and to be capable of carrying out necessary examinations and arranging appropriate investigations and treatment

KNOWLEDGE

Rectal bleeding

- Can discuss causes - haemorrhoids; neoplasia of anus and recto-sigmoid colon, colitis and Crohn's disease of rectum
- Be able to investigate symptoms appropriately, construct differential diagnosis
- Demonstrates willingness to undertake appropriate investigations and treatment Appreciates patient's concerns

Perianal fistulae

- Causes of benign fistulae and fistulae complicated by perianal sepsis and IBD
- Demonstrates willingness to investigate, treat, and refer to surgeons as appropriate

SKILLS

- Manage rectal bleeding: be able to examine patients with rectal bleeding, flexible sigmoidoscopy, colonoscopy and undertake appropriate action
- Manage perianal fistula: be able to investigate including use of MRI, give medical treatment and liaise with surgical colleagues when necessary
- Multidisciplinary team working

ASSESSMENT & LEARNING METHODS

- Clinical presentations
- CBD
- DOPS – colonoscopic competency (see endoscopic curriculum)

Colorectal Cancer

Objective: To be competent to recognize presenting features of lower GI cancers and to obtain evidence to confirm the diagnosis: to advise and initiate treatment which is appropriate to the patient's needs

KNOWLEDGE

- Pathology (types) pathogenesis, clinical, radiological features, complications, medical and surgical options, palliative care, prognosis
- Communication with patients and their relatives and with colleagues e.g. in breaking bad news, in a multidisciplinary approach
- Appreciate potential value of contributions from colleagues and other health professionals
- Acknowledge patients' right to be involved in decisions

SKILLS

- Assess, investigate and stage lower GI cancers and make appropriate decisions regarding treatment modalities
- Multidisciplinary team working

ASSESSMENT & LEARNING METHODS

- Case presentations
- CBD
- DOPS: Colonoscopy competency (see endoscopy curriculum)

Liver

Objective: To understand the pathophysiology of hepatic dysfunction, its investigation, assessment, differential diagnosis, likely cause and contributing factors (see also subspecialty training in Hepatology)

Assessment of Liver Function

Objective: To understand and be able to recognise the manifestations of hepatic dysfunction and the range of disease processes which may be responsible To know the range of investigations available and be able to advise of the selection and interpretation of appropriate tests To understand the place of liver biopsy in the management of patients with liver dysfunction, to know the indications, contra-indications and risks, and the techniques available

KNOWLEDGE

Pathophysiology and investigation of liver dysfunction

- Knowledge of bilirubin metabolism, hepatic and biliary inflammatory processes, hepatic blood flow
- Knowledge of biochemical, haematological, viral, autoimmune and metabolic markers of liver disease, and ability to select appropriate markers
- Indications for liver biopsy, abdominal ultrasound, CT, ERCP, MRI/ERCP/EUS
- Demonstrates willingness to use appropriate tests in correct circumstances

Liver biopsy

- Knowledge of technique, types of needle, pre and post procedure care, complications
- Be able to recommend ultrasound guidance or transjugular approach as necessary, recognise complications
- Demonstrates willingness to undertake procedure or refer to radiologist for ultrasound guidance or transjugular biopsy as appropriate

SKILLS

- Recognise the range of disease processes possible
- Select and interpret appropriate markers
- Select and interpret appropriate tests as required
- Recommend and obtain informed consent for ultrasound guidance liver biopsy

ASSESSMENT & LEARNING METHODS

- Clinical presentations
- CBD

Jaundice

Objective: To understand the production of bile, the structure and function of the biliary system; diseases of the biliary tract. The significance of jaundice, its causes and investigation To be able to advise on the management of a patient with jaundice and recommend treatment

KNOWLEDGE

Jaundice - structure and function of the biliary system:

- Knowledge of anatomy and physiology of the biliary system
- Can describe the physiology of bile production
- Causes of extra and intrahepatic biliary obstruction and their clinical manifestations
- Differential diagnosis of jaundice (non-obstructive) including hepatitis, alcoholic liver disease, biliary obstruction, chronic liver disease (e.g. AIH, PBC, PSC)
- Medical, surgical and radiological treatment of jaundiced patients
- Knowledge of indications and complications of ERCP
- Demonstrates willingness to recognise the development of various causes of jaundice and take appropriate action

SKILLS

- Recognise biliary obstruction and its complications
- Make use of and interpret investigations of jaundiced patients including ultrasound, CT, MRI, ERCP and liver biopsy and initiate appropriate treatment
- Select the most appropriate treatment for individual patients

ASSESSMENT & LEARNING METHODS

- Clinical presentations
- CBD

Hepatosplenomegaly

Objective: To be able to determine the cause of an hepatosplenomegaly and to recommend appropriate management or refer for other specialist opinion

KNOWLEDGE

Hepatosplenomegaly

- Knowledge of causes of hepatosplenomegaly due to systemic disease
- Knowledge of causes of cirrhosis – chronic viral hepatitis, AIH, PBC, PSC, alcohol liver disease, NASH, haemochromatosis, alpha1 antitrypsin deficiency and Wilson’s disease, and vascular disorders, and select therapeutic options where available
- Knowledge of complications of cirrhosis and ability to order and interpret appropriate investigations for complications of cirrhosis
- Knowledge of complications of drug therapies associated with treatment of cirrhosis
- Demonstrates willingness to diagnose and treat liver disease

SKILLS

- Diagnosis of cirrhosis and hepatosplenomegaly due to systemic disease
- Make use of and interpret investigations of jaundiced patients including ultrasound, CT, MRI, ERCP and liver biopsy and initiate appropriate treatment
- Select the most appropriate treatment for individual patients
- Recognise need for referral to specialist liver unit for consideration for liver transplantation

ASSESSMENT & LEARNING METHODS

- Clinical presentations
- CBD

Ascites and Other Abdominal Swellings

Objective: To be able to determine the cause of an abdominal swelling and to recommend appropriate management or refer for other specialist opinion

KNOWLEDGE

Ascites

- Pathophysiology of portal hypertension
- Differential diagnosis of ascites (hepatic and non-hepatic)
- Knowledge of management of spontaneous bacterial peritonitis with diuretics, antibiotics, and albumin as necessary
- Knowledge of appropriate use of paracentesis, complications of procedure
- Knowledge of indications for and complications of TIPS
- Demonstrates willingness to consult with and refer to a specialist unit as appropriate

Abdominal masses including cysts

- Causes of hepatic and extrahepatic masses, knowledge of benign and malignant liver tumours
- Make use of and interpret investigations including ultrasound, CT, MRI, ERCP and liver biopsy
- Knowledge of treatment modalities for liver cancer
- Demonstrates willingness to investigate or to refer to surgeons as appropriate
- Be aware of patient's anxiety regarding potential outcome of investigation

SKILLS

- Give a differential diagnosis and safely manage ascites
- Recognise abdominal masses and initiate appropriate investigations
- Recognise need for referral to specialist liver unit for consideration for liver transplantation

ASSESSMENT & LEARNING METHODS

- Clinical presentations
- CBD
- DOPS: Paracentesis

Liver Failure and Encephalopathy

Objective: To understand the pathogenesis of the features of acute and chronic liver failure, and the occurrence of hepatic encephalopathy To be able to separate encephalopathy from other confusional states in patients with liver disease and to arrange to provide treatment which is appropriate

KNOWLEDGE

Hepatic encephalopathy

- Knowledge of pathophysiology, clinical features, stage and precipitants of hepatic encephalopathy in liver disease
- Recognise, investigate and treat alcohol withdrawal syndromes and other causes of confusion
- Demonstrates willingness to recognise and treat hepatic encephalopathy

Liver failure

- Causes and manifestations of acute and chronic hepatic failure
- Demonstrates willingness to consult and refer to specialist liver unit as appropriate

SKILLS

- Recognise, investigate and treat hepatic encephalopathy, alcohol withdrawal syndromes and other causes of confusion
- Recognise progression to hepatic failure and need for referral to specialist liver unit for consideration for liver transplantation

ASSESSMENT & LEARNING METHODS

- Clinical presentations
- CBD

Sub-Specialty Training in Hepatology (Advanced Liver Sub-Specialty Training Option)

Objective: To develop more detailed knowledge and advanced skills in the diagnosis and management of the diseases of the liver and biliary system. Such advanced training will be available only in specialist Liver Units

KNOWLEDGE

Anti viral therapy

- Criteria for treatment and efficacy of antiviral therapy for Hepatitis B & C
- Ability to administer and monitor complications of antiviral therapy
- Demonstrates willingness to participate in the diagnosis and management of advanced liver disease

Acute hepatic failure

- Causes and manifestations of acute hepatic failure and its complications including cerebral oedema and hepatorenal syndrome
- Awareness of progression of liver failure and need for liver transplantation
- Demonstrate a willingness to liaise appropriately with specialist liver unit

Benign and malignant tumours of the hepatobiliary system

- Hepatic adenoma, hepatoma and cholangiocarcinoma and medical, surgical and radiological management
- Ability to advise use of screening, and different therapeutic treatment modalities including immunotherapies and biologic therapies

Liver transplantation

- Selection of patients and timing of transplantation Management of peri- and post-operative complications including rejection and infection
- Knowledge of immunosuppression therapy, complications and drug interactions
- Knowledge of long-term complications of liver transplantation
- Appreciate patients and family anxiety pertaining to liver transplantation
- Demonstrate willingness to liaise with specialty transplant units

SKILLS

- Administer and monitor antiviral therapy for hepatitis B & C with appropriate investigations as necessary
- Recognise progression of acute hepatic failure and the need for liver transplantation
- Advise use of and follow up of TIPS or surgery in patients with portal hypertension
- Advise use of screening and the different therapeutic strategies for individual patients
- Explain complex diagnosis in simple terms to patient
- Enrol multidisciplinary team in investigation and treatment
- Liver transplantation module:
- Appropriately select patients for liver transplantation
- Be able to manage complications of transplantation
- Be able to manage immunosuppressive therapy

ASSESSMENT & LEARNING METHODS

- Mini-CEX
- CBD

Endoscopy Training Module

Introduction

The Conjoint Board of the Royal College of Physicians of Ireland (RCPI) and the Royal College of Surgeons in Ireland (RCSI) oversee training in Endoscopy in Ireland for SpRs who are registered on a RCPI or RCSI Higher Specialist Training (HST) programme

Outline of Training in Endoscopy for SpRs

Trainees are expected to complete their endoscopic training within a 5 year period while registered on a HST programme. Accreditation will be awarded at two levels: General and Specialist level

Entry to Programme

Trainees who are registered on a RCPI or RCSI HST programme are eligible for endoscopy training. The training bodies will notify the Conjoint Board of the trainees who are undertaking endoscopy training at their commencement of HST. The Conjoint Board must be aware at all times of who is in training.

1. Curriculum

The endoscopy curriculum will accredit trainees for upper gastrointestinal endoscopy and colonoscopy

2. Requirements for Training

Training in individual training units must include:

- training in radiological and pathological findings as well as the technical aspects of endoscopy
- training in sedation practices pertaining to endoscopy procedures based on standard guidelines
- an understanding of the principles of and practice of cleaning and disinfection of modern endoscopic instruments
- familiarisation with the commonly used drugs for sedation and experience of airway support
- participate in simulator course on entry to the programme
- participate in Basic Endoscopy course in year one
- participate in Colonoscopy Skills course in year 2

Procedure requirements for General Training:

The following requirements must be met for General level of training:

- Upper gastrointestinal endoscopy:
 - perform at least 200 unassisted and completed examinations independently under supervision
 - a minimum of 20 therapeutic procedures excluding polypectomy; of these 10 must involve control of upper gastrointestinal haemorrhage
 - DOPS assessments annually at 1 month, 6 months and at end of year. Additional DOPS assessments may be required at the discretion of the trainer

- Colonoscopy:
 - perform a minimum of 200 unassisted, supervised, complete colonoscopies to the caecum in patients with intact colons (i e no previous colonic resection)
 - perform snare polypectomies in a minimum of 30 patients
 - achieve at least a 90% caecal intubation rate by the completion of training

Trainees must complete at least the minimum number of unassisted and supervised procedures; it is understood that most trainees will require more procedures than the minimum required to achieve proficiency and satisfy all criteria.

Summative DOPS for each procedure will be required prior to certification. These should be carried out under an external examiner.

3. Logbooks

Details of all cases attempted from the commencement of training to the completion of training, including those not successfully completed, must be recorded prospectively and sequentially in the logbooks provided. In each case the indication for endoscopy, sedation used and any complications must be recorded. Logbook entries must be acknowledged by the supervisor.

4. Requirements for training units

Each training unit should have a named lead trainer who may not individually supervise each trainee but whose responsibilities include:

1. Oversee training in endoscopy within that unit
2. Ensure trainees proceed through their curriculum and record supervision and assessment at appropriate times
3. Ensure trainees receive adequate exposure for training

Each trainee will be answerable to the lead trainer.

Requirements for Trainers

Requirements for Lead Trainer

- have a specific interest in diagnostic/therapeutic endoscopy
- Upper GI endoscopy: have personal performance data in line with national standards
 - Lifetime endoscopy number >200
 - Lifetime serious complications <0.5%
 - Mean sedation rates under 70yrs /70+ Midazolam <5mg / <2.5mg
 - Retroflexion in stomach >95%
 - D2 intubation > 95%
- Colonoscopy: have personal performance data in line with national standards
 - Caecal intubation rates on an intention-to-intubate basis ≥90%
 - Mean sedation levels in the under and over-70's (≤5mg midazolam and ≤50mg pethidine in <70 yrs; (≤2.5mg midazolam and ≤25mg pethidine in ≥70 yrs)
 - Polyp detection and removal rate of ≥10%
- have performed 100 gastroscopies, + 100 colonoscopies within last 12 months
- be able to personally audit trainee's performance data in line with curriculum
- be recognised by the conjoint committee

Requirements for Trainer:

- personally supervise the trainee's training
- acknowledge the procedures logged by the trainee
- assess competence after the trainee has independently completed the minimum number of procedures required. It is expected that most trainees will require more than the stated minimum number of procedures
- Attest that the trainee is:
 - Competent to perform the specific procedure and /or specific therapy safely and expeditiously
 - Able to competently integrate indications for endoscopy and endoscopic findings and therapy into patient management
 - Able to understand risk factors, recognise and manage complications and
 - Able to recognise personal and procedural limits

Introduction

Gastrointestinal trainees both physicians and surgeons (hereafter referred to as “trainees”) must learn to investigate and manage a variety of benign and malignant GI disease. The ability to order, perform and interpret GI endoscopy is an integral part of the practice of a gastroenterologist or general surgeon and so dedicated training in GI endoscopy is an inherent component of the teaching of a GI trainee

The trainee should be technically proficient, understand the indications and contraindications, limitations and complications of the procedure and select patients accordingly. They should have the ability to interpret results and manage the patient. They should be able to manage a safe and efficient endoscopy unit and provide a quality endoscopy service. Trainees should recognize that endoscopic procedures are integral aspects of clinical problem solving and not isolated technical activities. Trainees should understand that endoscopic decision making , technical proficiency and patient management are interdependent.

The purpose of this curriculum is to set out the competencies that a trainee must acquire and demonstrate in order to be considered trained in endoscopy.

Following satisfactory completion of a training programme and after satisfying approved methods of assessment the trainee should be able to:

- Assess and refer patients appropriately for GI endoscopy
- Ensure that informed consent is obtained from the patient prior to endoscopy or to ensure that appropriate steps are taken if the patient cannot give informed consent
- Ensure patient safety is maintained during preparation for the procedure, throughout the procedure and in the period following the procedure
- Demonstrate an understanding of scope reprocessing and accessory handling
- Demonstrate an understanding of the issues involved in running an endoscopic service
- Provide safe and effective conscious sedation where appropriate for endoscopic procedures
- Perform diagnostic and therapeutic endoscopic procedures within the limit of their technical ability but to accepted national and international standards and norms. Specifically the trainee will be expected to diagnose benign and malignant disease found at GI endoscopy and directing appropriate management. Furthermore the trainee will be expected to manage upper and lower GI bleeding and GI polyps
- Collect appropriate specimens and provide direction on their handling
- Provide reports and review results of endoscopic procedures
- Demonstrate multidisciplinary working in their provision of an endoscopy service by appropriate liaison with colleagues in primary care, radiology, pathology, surgery, other medical specialties and professionals allied to medicine as necessary
- Participate in personal and institutional audit of endoscopic practice and outcome
- Demonstrate an awareness of the importance of maintaining their endoscopic skills and safely learning new ones by means such as reflective practice, attendance at teaching courses, attendance with colleagues who are accomplished practitioners and teachers of the procedure in question and periods of self directed learning or supervised remedial action where their skills are suboptimal

This curriculum document will be divided into two broad domains, generic skills and specific skills. In practice the trainee will have to show proficiency in both these areas as in practice the competent endoscopist must be able to explain the procedure, its risks benefits and alternatives and must then be able to safely complete the procedure to therapeutic intent.

Generic Skills in Gastrointestinal Endoscopy

COMMUNICATION WITH PATIENTS/ FAMILY

The trainee must be able to explain the procedure to the patient in a way that helps the patient to understand what will be done, why, what the alternatives are and the risks and benefits of various options. The trainee must be satisfied that the patient has considered and retained the information and made a decision based on that understanding. The trainee must demonstrate that (s)he understands that consent is a continuous process and must react appropriately if consent is withdrawn at any stage before or during the procedure. The trainee must know how to proceed in the patients' best interest where the patient is incapable of giving consent either due to mental incapacity or the urgency of a life threatening situation. The trainee must demonstrate understanding of how and when it is appropriate to delegate some or all of the consent process. (See generic sections in HST curriculum)

LIAISON WITH COLLEAGUES

The trainee must demonstrate understanding of and competence in interaction with other healthcare professionals such as endoscopy or ward nurses, surgeons, radiologists, general practitioners and referring colleagues. This includes communication of appropriate selection of patients for endoscopy or recommendation of the appropriate alternative investigation, appropriate preparation of the patient, effective liaison with nursing and other staff to ensure satisfactory scheduling and running of endoscopy lists and effective communication of results and the management plan to the referring personnel. The trainee must demonstrate appropriate confidential medical record keeping and ensure that their log book of procedures is kept safe.

SCOPE REPROCESSING, HANDLING OF ACCESSORIES

The trainee must know how to handle an endoscope and what is involved in the safe washing and decontamination of the scope and where relevant the accessories. The trainee must demonstrate understanding of safety issues regarding maintenance of washing machines, disinfectants, regular water testing and scope traceability. The trainee must describe knowledge of how to respond to a break down in infection control measures in the use or washing of scopes, the accessories or injectable material in the endoscopy unit.

SEDATION AND PATIENT SAFETY

The trainee must show understanding of the process of conscious sedation, knowledge of the drugs involved and their potential adverse effects. The trainee must demonstrate safe and effective use of conscious sedation, analgesia and cardio-respiratory monitoring of the patient during the procedure. The trainee must have skills in basic life support and airway protection.

MANAGEMENT OF A UNIT, WAITING LIST, SCHEDULING

The trainee must demonstrate an understanding of the issues involved in staffing an endoscopy unit, maintaining a waiting list, scheduling patients, appropriate handling of repeat procedures, patients who Do Not Attend and situations where patients or entire lists must be cancelled.

SPECIFIC SKILLS IN GASTROINTESTINAL ENDOSCOPY

The specific endoscopic procedures that will be covered are:

- OGD including diagnostic and therapeutic as well as PEG, PEG(J) and NJ tube insertion
- Colonoscopy, both diagnostic and therapeutic including rigid and flexible sigmoidoscopy as well as diagnostic proctoscopy

The trainee must have an understanding of the indications for these procedures and the ability to undertake the appropriate therapeutic options. Each trainee should be adequately trained such that by the completion of the training programme(s) he is competent to independently perform diagnostic and therapeutic OGD and colonoscopy.

General Training

Upper Gastrointestinal Endoscopy/OGD

Objectives: The trainee should be able to discuss and demonstrate the following:

- Indications and contraindications for the procedure
- Appropriate patient selection
- The ability to obtain informed consent for these procedures
- Recognition of the anatomic landmarks of the normal oesophagus, stomach and duodenum
- Interpretation of endoscopic findings
- Integration of findings or therapy into the patient management plan
- Diagnosis and management of endoscopic complications
- Recognise personal and procedural limits and know when to request help
- Equipment necessary and available for upper endoscopy
- Proper maintenance and cleaning and preparation of equipment

Specific attention should be focused on understanding and learning the following skills:

- Safe and effective completion of diagnostic OGD to therapeutic intent in more than 90% of cases
- The application and interpretation of non-invasive patient monitoring devices
- The appropriate use of conscious sedation and analgesia
- Technique and indications for hot and cold biopsies
- Proper use of snare cautery
- Retrieval of foreign bodies
- Use of cytology brushes and needles
- Appropriate use of cautery/heater probes
- Options for laser or other ablation of oesophageal tumors
- Indications for and placement of overtubes
- Diagnosis and medical and/or endoscopic management of acute upper gastrointestinal heamorrhage including oesophageal varices with sclerotherapy or band ligation (see detailed therapeutic OGD section)
- Diagnosis and management of polyps
- Indications for and insertion of PEGs (see detailed therapeutic OGD section)

KNOWLEDGE

The following disease processes should be familiar to the trainee, and their appearance demonstrated when feasible during OGD. The trainee should be able to identify and discuss the implications and treatment of the following:

Oesophagus

- Oesophageal diverticula
- Hiatus hernia
- Barrett's oesophagus
- Schatzki's rings
- Webs
- Peptic oesophagitis
- Infectious oesophagitis
- Eosinophilic oesophagitis
- Oesophageal varices
- Radiation changes
- Strictures
- Oesophageal carcinoma
- Oesophageal motility disorders
- Oesophageal foreign bodies
- Oesophageal perforations
- Tracheoesophageal fistula

Stomach

- hiatus hernia
- anatomic variants and postoperative anatomy
- gastritis
- infections
- ulcers
- gastric carcinoma
- arteriovenous malformations
- gastric varices
- portal hypertensive gastropathy
- Gastric Crohns
- polyps

Duodenum

- ulcers
- diverticula
- macroscopic evidence of villous atrophy
- benign duodenal lesions
- inflammatory bowel disease
- malignant duodenal lesions

Therapeutic OGD

Upper Gastrointestinal Bleeding

Objectives: The trainee should be well informed regarding the diagnosis and management of upper gastrointestinal bleeding. This includes knowledge about resuscitation of the patient, endoscopic management as well as appropriate surgical treatment when other interventions have failed.

KNOWLEDGE

The following aspects of the diagnosis and management of upper gastrointestinal bleeding should be practiced and demonstrated:

- Appropriate resuscitative and monitoring measures
- Indications and preparation for upper endoscopy
- Identification of bleeding sites and treatment options available
- Morbidity and mortality associated with endoscopy
- Management of bleeding ulcers in the era of H pylori, antiplatelet agents, NSAIDs and their alternatives
- Management of active bleeding, visible vessels, adherent clot
- Use of the GI bleeding morbidity and mortality scores that are widely available eg Rockall, Forrest
- Use of Senstaken Blakemore tube, band ligation, sclerosant, electrocautery, heater probe, endoscopic clips, Argon Plasma Coagulation in the management of bleeding
- Knowledge of the complications of procedures
- Recognition of the failure of endoscopic treatment to control upper GI bleeding and appropriate knowledge of the alternatives
- Appropriate and timely involvement of GI surgeon and radiologist

Objective: The trainees should be familiar with the topics listed below

KNOWLEDGE

- Indications for performing enteral access, including neurologic, nutritional, mechanical, and oncologic reasons
- Appropriate candidates for PEG and PEG/J based on medical condition, nutritional status, anatomic situation, aetiology of inability to maintain adequate oral intake
- Patient preparation, including correct selection, informed consent, preoperative antibiotics, other tests as needed
- Techniques of PEG placement and knowledge of the role of radiologic placement techniques
- Techniques of percutaneous jejunostomy, including primary placement and conversion of a PEG to PEJ
- Techniques of nasojejunal tube placement and indications for use
- The use and types of buttons available, their indications, maintenance, and technique of changing them
- Complications possible from PEG or PEJ, their diagnosis and management (including aspiration, perforation, inadvertent early removal, gastric wall and body wall necrosis, and leakage at the site)

Lower Gastrointestinal Endoscopy

Objective: To become experienced and competent in sigmoidoscopy (rigid and flexible) and colonoscopy. Trainees should be able to discuss and demonstrate diagnostic sigmoidoscopy and colonoscopy, to manage lower gastrointestinal bleeding, polyps, and clips

KNOWLEDGE

To demonstrate:

- Understanding of the indications and contraindications for these procedures and how to perform them to an acceptable standard
- The ability to obtain informed consent for these procedures and how to deal with consent withdrawal at all stages including during the procedure,
- Selection of the most appropriate bowel preparation
- Competence in patient selection and management of medical issues during preparation and performance of the lower GI endoscopy eg management of diabetes, anticoagulation, patients in need of antibiotic prophylaxis
- Knowledge of the benefits and limitations of the alternatives to colonoscopy, the therapeutic options available as part of lower GI endoscopy, and the role of colonoscopy and other screening modalities in bowel cancer screening
- Knowledge of the quality measures used to assess colonoscopic competence,
- Knowledge of sedative and analgesic options for lower GI endoscopy,
- Competence in using a variety of means of assessing, dyeing, tattooing and removing and retrieving polyps,
- Competence in the recognition of malignant transformation in polyps and recognition of polyps that cannot or should not be removed endoscopically,
- Competence in the recognition of early and late complications of colonoscopy and or polypectomy and the appropriate investigation and management of colonoscopy complications
- Diagnosis and management of acute and chronic lower gastrointestinal haemorrhage

Working knowledge of Instrumentation and equipment

- Scopes:
- Anoscopes
- Sigmoidoscopes (rigid and flexible)
- Colonoscopes
- Cleaning and disinfecting scopes
- Accessories
- Biopsy forceps (hot and cold)
- Snares
- Cautery and heater probes
- Cytology brushes and needles
- Dye, dye spray catheters, tattooing
- Lasers and Argon Plasma Coagulation
- Endoscopic clips
- Retrieval baskets and nets

Diagnostic Endoscopic Techniques:

- Independently perform flexible sigmoidoscopy
- Knowledge of the limitations of such examinations
- Independently performing colonoscopy including the identification of landmarks including:
 - Anal verge
 - Rectosigmoid junction
 - Splenic and hepatic flexure
 - Appendix orifice
 - Ileocaecal valve and the ileum
- Recognition and correct of loops
- Technique of torque steering
- Use of change of patient position, external compression and the inspection of folds and suctioning of pools to clear the view on adequate withdrawal

Therapeutic Techniques

KNOWLEDGE

Biopsy

- Performing colonoscopic biopsy
- Working knowledge of appropriate specimen handling

Polypectomy

- Independently perform polypectomy upon completion of training
- Explain the risks and benefits of polypectomy to patients
- Capable of identifying polyps as flat, sessile, pedunculated
- Knowledge of the features that indicate hyperplastic polyps versus adenomas and polyps with high risk of containing malignancy
- Appropriately use dye spray or tattooing in polyp marking and visualisation
- Set up the electrocautery unit and identify and correct common technical failures
- Select and perform the appropriate form of polypectomy according to the polyp size, location and form
- Select and manipulate the appropriate range of endoscopic accessories to complete the polypectomy and specimen retrieval
- Understand the polypectomy options including cold biopsy, cold snare, hot snare, endomucosal resection, piecemeal removal, appropriate use of clips, injections and loops prior to or during polypectomy
- Recognition of large polyps or those difficult to access or requiring special manoeuvres to remove and referring these for advanced polypectomy, surgery, or other treatment where necessary

Treatment of lower GI bleeding

- Demonstrate competence in the diagnosis and management of lower GI bleeding including the use of endoscopic haemostasis
- Use of injection of vasoconstrictors, banding, clipping and placement of loops

Colonoscopic Decompression of Pseudo-Obstruction and Volvulus

- Independently perform colonoscopic decompression of these conditions

Colonoscopic control of lower gastrointestinal bleeding

- Correctly identify patients who are bleeding from the lower GI tract
- Be familiar with resuscitation of the patient and triage to the appropriate investigation pathway i.e. colonoscopy, (CT)angiography, radionuclide scanning

The following disease processes should be familiar to the trainee, and their appearance demonstrated when feasible during sigmoidoscopy and colonoscopy. The trainee should be able to identify and demonstrate the treatment of the following:

Colonic polyps

- False or suction polyps
- Epithelial polyps
 - Adenomatous polyps
 - Tubular
 - Tubulovillous
 - Villous
 - Adenoma-carcinoma sequence
 - Appropriate polyp follow up, advise on family screening and need for other GI or non GI surveillance
 - Hyperplastic
 - Inflammatory
 - Juvenile
- The polyposis syndromes
- Submucosal lesions
- Endometrial implants

Colonic Malignancies

- Adenocarcinoma
 - Appearances
 - Biopsy and cytology
 - Synchronous adenomas and cancers
 - Surveillance
 - Family screening
 - Role of genetic studies
- Non adenocarcinoma malignancy of the bowel
- Direct extension of non GI malignancy eg
- Metastases to the bowel

Inflammatory Disease

- Ulcerative colitis
 - Appearance and grading
 - Cancer surveillance
 - Dysplasia
- Crohn's disease
 - Appearance
 - Features distinguishing from U C
 - Cancer surveillance
- Viral
- Bacterial and amoebic colitis
- Antibiotic associated colitis
- Ischemic colitis
- Radiation colitis/proctitis
- Rare lesions
 - Tuberculosis
 - Behcet's disease
 - Schistosomiasis
 - Worms
- Drug induced

Colonic Strictures

- Aetiologies
 - Diverticular
 - Malignant
 - Inflammatory bowel disease
 - Ischaemic
 - Radiation
 - Post operative
 - Infective

Colonic Bleeding

- Aetiologies
 - Neoplastic
 - Adenomas
 - Malignant strictures
 - Leiomyomas/sarcomas
 - Inflammatory bowel disease
 - Ischemic colitis
 - Radiation colitis
 - Diverticular disease
 - Vascular
 - Angiodysplasia
 - Hemorrhoids
 - Colonic varices
 - Hereditary hemorrhagic telangiectasias
 - Cavernous hemangioma

Treatment

- Role of colonoscopy
- Electrocautery
 - Monopolar
 - Bipolar
- Heater probe
- Injection
- Argon beam
- Laser
- Vasopressin

Summary of Endoscopy Curriculum

The trainee must study an approved curriculum in gastrointestinal endoscopy and demonstrate competence as measured by DOPS.

The core competencies will be:

- To assess and refer patients appropriately for GI endoscopy
- To ensure that informed consent is obtained from the patient prior to endoscopy or to ensure that appropriate steps are taken if the patient cannot give informed consent
- To ensure patient safety is maintained during preparation for the procedure, throughout the procedure and in the period following the procedure
- To demonstrate an understanding of scope reprocessing and accessory handling
- To demonstrate an understanding of the issues involved in running an endoscopic service
- To provide safe and effective conscious sedation where appropriate for endoscopic procedures
- To perform diagnostic and therapeutic endoscopic procedures within the limit of their technical ability but to accepted national and international standards and norms Specifically the trainee will be expected to diagnose benign and malignant disease found at GI endoscopy and direct its appropriate management Furthermore the trainee will be expected to manage upper and lower GI bleeding, upper GI strictures and GI polyps
- To correctly identify pathology found at endoscopy and to direct appropriate management following its discovery
- To collect appropriate specimens and to provide direction on their handling
- To provide reports and review results of endoscopic procedures
- To participate in personal and institutional audit of endoscopic practice and outcome

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
Section 1 - Training Plan				
Personal Goals Plan (Copy of agreed Training Plan for your current training year signed by both Trainee & Trainer)	Required	1	Training Post	Form 052
Personal Goals Review Form	Required	1	Training Post	Form 137
Weekly Timetable (Sample Weekly Timetable for Post/Clinical Attachment)	Required	1	Training Post	Form 045
On Call Rota	Required	1	Training Post	Form 064
Section 2 - Training Activities				
Outpatient Clinics				
General Gastroenterology clinic (minimum 1 per week)	Required	40	Year of Training	Form 001
Ward Rounds/Consultations				
Consultant led (minimum 2 per week)	Required	80	Year of Training	Form 002
SpR led (2 per week)	Required	80	Year of Training	Form 002
Emergencies/Complicated Cases				
Must include one of each of the following Gastrointestinal emergencies cases				
GI infections	Required	3	Training Programme	Form 003
Acute abdomen	Required	3	Training Programme	Form 003
Bleeding oesophageal varices	Required	3	Training Programme	Form 003
Bleeding peptic ulcer	Required	3	Training Programme	Form 003
Fulminant colitis	Required	3	Training Programme	Form 003
Cholangitis	Required	3	Training Programme	Form 003
Liver failure	Required	3	Training Programme	Form 003
Acute pancreatitis	Required	3	Training Programme	Form 003
Procedures/Practical Skills/Surgical Skills				

Curriculum Requirement	Required/Desirable	Minimum Requirement	Reporting Period	Form Name
Non-endoscopic procedures - Paracentesis	Required	1	Year of Training	Form 004
Endoscopy Module				
Upper Gastrointestinal Endoscopy (OGD)				
Diagnostic OGD	Required	175	Training Programme	Form 100
Therapeutic OGD	Required	25	Training Programme	Form 100
Colonoscopy				
Diagnostic Colonoscopy	Required	175	Training Programme	Form 101
Therapeutic Colonoscopy	Required	25	Training Programme	Form 101
Additional/Special Experience Gained (Advanced Options)				
Cases could include the following				
Advanced Gastroenterology	Desirable	1	Training Programme	Form 005
Advanced Hepatology	Desirable	1	Training Programme	Form 005
Physiological measurement	Desirable	1	Training Programme	Form 005
Advanced nutrition	Desirable	1	Training Programme	Form 005
Paediatric and adolescent liaison	Desirable	1	Training Programme	Form 005
Advanced therapeutic endoscopy	Desirable	1	Training Programme	Form 005
Imaging	Desirable	1	Training Programme	Form 005
Cancer care	Desirable	1	Training Programme	Form 005
Palliative medicine	Desirable	1	Training Programme	Form 005
Communicable disease	Desirable	1	Training Programme	Form 005
Psychological medicine	Desirable	1	Training Programme	Form 005
Elective (free option e.g. genetic study)	Desirable	1	Training Programme	Form 005
The interface between primary and secondary care in Gastroenterology	Desirable	1	Training Programme	Form 005
Relatively Unusual Cases	Desirable	1	Training Programme	Form 019
ICU/CCU	Desirable	1	Training Programme	Form 090
Chronic Cases/Long term care See the following examples: Chronic liver disease; Liver transplantation; Management of ascities; Irritable bowel syndrome; Chronic pancreatitis; AIDS; Dysphagia; Ulcer disease; Oesophageal & Gastric cancer	Required	10	Training Programme	Form 066
Management Experience	Desirable	1	Training Programme	Form 110
Section 3 - Educational Activities				
Mandatory Courses				

Curriculum Requirement	Required/Desirable	Minimum Requirement	Reporting Period	Form Name
ACLS	Required	1	Training Programme	Form 006
Basic skills of GI Endoscopy	Required	1	Training Programme	Form 006
Colonoscopy Skills	Required	1	Training Programme	Form 006
Endoscopy Simulator Course	Required	1	Training Programme	Form 006
Ethics I: Professionalism	Required	1	Training Programme	Form 006
Ethics II: Ethics & Law	Required	1	Training Programme	Form 006
Ethics III: Research	Required	1	Training Programme	Form 006
Ethics IV: End of Life	Required	1	Training Programme	Form 006
Health Research – An Introduction	Required	1	Training Programme	Form 006
HST Leadership in Clinical Practice (year 3+)	Required	1	Year of Training	Form 006
Mastering Communications (Year 1)	Required	1	Training Programme	Form 006
Nutrition course	Required	1	Training Programme	Form 006
Performing Audit (Year 1)	Required	1	Training Programme	Form 006
Non – Mandatory Courses	Desirable	1	Training Programme	Form 007
Health Research Methods for Clinicians	Desirable	1	Training Programme	Form 007
Study days See the following examples: Laboratory tests of GI Function; Care of the cirrhotic patient; Update on HBV; Update on oesophageal disease; BSG; Ethical challenges in gastro; PUD; IBD update; Practical issues in ERCP; Complications of PHT	Required	5	Year of Training	Form 008
Participation at In-house activities minimum of 1 per month from the categories below:				
Grand Rounds (minimum of 2 per month)	Required	5	Year of Training	Form 011
Journal Clubs	Required	20	Year of Training	Form 011
Radiology/Pathology conference/MDT	Required	10	Year of Training	Form 011
Pathology conference	Required	1	Year of Training	Form 011
Examinations e.g. European Fellowship	Desirable	1	Training Programme	Form 012
Delivery of Teaching				
Lecture Tutorial Bedside teaching	Required	5	Year of Training	Form 013
Research	Desirable	1	Training Programme	Form 014

Curriculum Requirement	Required/Desirable	Minimum Requirement	Reporting Period	Form Name
Audit activities and Reporting (1 per year either to start or complete, Quality Improvement (QI) projects can be uploaded against audit)	Required	1	Year of Training	Form 135/152
Publications	Desirable	1	Year of Training	Form 016
Presentations (1 oral or poster per year)	Desirable	1	Year of Training	Form 017
National/International meetings (minimum 1 per year)	Desirable	1	Year of Training	Form 010
Additional Qualifications	Desirable	1	Training Programme	Form 065
Section 4 - Assessments				
DOPS				
OGD	Required	2	Year of Training	Forms 080 and 081
Colonoscopy	Required	2	Year of Training	Form 079
PEG	Required	2	Year of Training	Form 021
CBD See the following examples: Upper GI Tract; Upper abdominal pain/dyspepsia; Upper GI Symptoms and their management; Nausea & vomiting; Assess, investigate and stage upper and lower GI Cancers; Laboratory tests of GI Function; Malabsorption, anorexia and weight loss; Short bowel syndrome; Anaemia; Abdominal pain; Jaundice; Liver failure and encephalopathy; Diagnose and manage Upper gastrointestinal bleeding; Constipation, diarrhea; Diagnosis and management of rectal bleeding & perianal fistula; recognition and referral for liver transplant; management of complex IBD	Required	4	Year of Training	Form 020
Mini-CEX (At least two Mini-CEX assessments)	Required	2	Year of Training	Form 023
Quarterly Assessments	Required	4	Year of Training	Form 092