

Joint Surgical Colleges Fellowship Examinations

Syllabus

General Surgery

May 2012

The Joint Surgical Colleges Fellowship Examination (JSCFE) syllabus defines the breadth and depth of knowledge, professionalism and clinical skills to be attained by surgeons in training. It specifies the levels of expertise to be anticipated at entry and at the various stages in training and defines the standards of competence expected on completion of the training programmes. The JSCFE adopts this standard as the one against which assessment will be made. The examination will assess various elements of applied knowledge, diagnostic skills, clinical judgment and professionalism.

Clinical Management

The examination is set at the level of knowledge and standard required of a recognised specialist (day one NHS UK/Ireland consultant standard) in the generality of the specialty. Given the range of cases, the spectrum of complexity and the ability to deal with variations and complications within the practice of this specialty, a candidate should be able to demonstrate that their training / experience is such that they can safely manage both common and more complex clinical problems.

Operative skills

While the examination does not formally assess technical operating ability the JSCFE considers it inappropriate to admit a candidate to the examination if there is any doubt as to their technical skills.

Professionalism and Probity

The development of a mature and professional approach in clinical practice is essential for safe and successful patient care. Attitudes towards patients and colleagues, work ethic, ability to deal with stressful issues and the effectiveness of communication skills in providing supportive care for patients and their families are the professional qualities expected of successful candidates in this examination.

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Introduction

The Intercollegiate Surgical Curriculum Programme (ISCP) provides the framework for systematic training from completion of the foundation years through to consultant level in the UK. It achieves this through a syllabus that lays down the standards of specialty-based knowledge, clinical judgement, technical and operative skills and professional skills and behaviour, which must be acquired at each stage in order to progress. The curriculum is web based and is accessed through www.iscp.ac.uk. The website contains the most up to date version of the curriculum and each of the ten surgical specialty syllabuses. The ten specialities include General Surgery, Vascular surgery, Urology, Paediatric surgery, Cardiothoracic Surgery, Trauma and Orthopaedic surgery, Oral and Maxillofacial surgery (OMFS), Plastic surgery, Neurosurgery and Otolaryngology (ENT). They all share many aspects of the early years of surgical training in common, but naturally become increasingly singular as training in each discipline becomes more advanced. Each syllabus will emphasise the commonalities and elucidate in detail the requirements for training in the different specialities.

This syllabus is designed for candidates who have declared general surgery as their specialty interest. The standard expected is that of a Day 1 Consultant in UK General Surgical practice.

Prior to sitting this examination it will be expected that the candidate will have gained competence in a wide range of knowledge and skills including the basic sciences which are common to all surgical specialities. These topics are defined in the syllabus for the MRCS examination (<http://www.intercollegiatemrcs.org.uk/new/guide.html>). This must be supplemented by the topics from the General Surgery Specialty syllabus as outlined below)

Eligibility Criteria

Candidates would normally have passed the MRCS examination of one of the four Surgical Royal Colleges

Alternatively, candidates would have successfully completed a locally registered *and higher* surgical training programme

It is expected that candidates will produce documentary evidence of having completed a minimum of 4 years surgical training following award of MRCS or equivalent.

The final decision on eligibility for admission to the examination will lie with the International Fellowship Examination Sub-Committee

Surgeons applying for this examination would be expected to demonstrate:

- Theoretical and practical knowledge related to surgery in general and to their specialty practice;
- Technical and operative skills;
- Clinical skills and judgement
- Generic professional and leadership skills;
- An understanding of the values that underpin the profession of surgery and the responsibilities that come with being a member of the profession;
- The special attributes needed to be a surgeon;
- A commitment to their ongoing personal and professional development and practice using reflective practice and other educational processes;
- An understanding and respect for the multi-professional nature of healthcare and their role within it

The syllabus is modular in format, with content that covers the major areas of highly specialised practice that are relevant to a general surgical practice. Each syllabus is intended to allow the successful candidate to develop an area of clinical interest and expertise upon appointment to a consultant post. Some will require further training in order to achieve the competences necessary for some of the rarer complex procedures.

SYLLABUS STRUCTURE

The syllabus lays down the standards of specialty-based knowledge, clinical judgement, technical and operative skills and professional skills and behaviour that must be acquired at each stage in order to progress. The syllabus comprises the following components:

- Specialty overview outlines which describe the following:
 - Details of the specialty
 - The scope of practice within the specialty
 - The key topics that a trainee will be expected to cover by the end of training
- Key topics that all trainees will cover and will be able to manage independently, including complications. These are also referred to as essential topics.
- Index procedures that refer to some of the more commonly performed clinical interventions and operations in the specialty. They represent evidence of technical competence across the whole range of specialty procedures in supervised settings. .

The Professional Behaviour and Leadership Skills syllabus is mapped to the Leadership framework as laid out by the Academy of Medical Royal Colleges and the Framework for Appraisal and Assessment derived from Good Medical Practice. The Professional Behaviour and Leadership skills section of the syllabus is common to all surgical specialties and is based on Good Medical Practice

- Leadership Framework - http://aomrc.org.uk/publications/statements/doc_download/132-medical-leadership-competency-framework.html
- Appraisal Framework - http://www.gmc-uk.org/static/documents/content/GMP_framework_for_appraisal_and_revalidation.pdf_41326960.pdf

The Scope and Practice of General Surgery

Trained specialists in general surgery will be competent to manage unselected emergency surgical patients and will have a developed interest in one of the areas of special interest associated with general surgery.

This list of Key Topics defines, in general terms the essential skills and levels of clinical expertise expected of a surgeon emerging from training. It is unlikely that the expertise will be confined to the descriptions that follow as surgeons may also develop additional special interests by the time they emerge from training. As it is used here, the term 'manage' equates to diagnosis, assessment and treatment or referral as appropriate.

At the end of training, the general surgeon will be able to:

Elective General Surgery

1. Manage benign and malignant lesions of the skin and subcutaneous tissues:

- * Recognise the common benign and malignant conditions, including sebaceous cyst, lipoma, neurofibroma, keratoacanthoma, basal cell carcinoma, squamous cell carcinoma and malignant melanoma
- * Diagnose and excise, biopsy or treat conservatively these common lesions
- * Able to apply straightforward plastic surgical techniques for primary wound closure
- * Refer for specialist surgical and oncological opinion for further management as necessary

2. Manage primary and recurrent hernia of the abdominal wall:

- * Competent to diagnose and manage patients presenting with primary and recurrent abdominal wall hernia including appropriate investigation as appropriate
- * Competent to perform primary hernia repair selecting appropriate approach (open or laparoscopic)
- * Competent to repair uncomplicated recurrent hernia involving other specialists as appropriate

3. Provide specialist surgical support in the management of conditions affecting the reticuloendothelial and haemopoietic systems:

- * Competent to diagnose, assess and manage appropriately patients presenting with lymphadenopathy (including infective / inflammatory and neoplastic)
- * Be familiar with indications for appropriate investigation in such situations, involving other specialists as appropriate
- * Competent to excise, biopsy (open or needle) or drain lymph nodes

Emergency General Surgery

1. Manage infections of the skin and superficial tissues:

- * Diagnose and manage from presentation to completion the common infections of the skin and superficial infections including abscess and cellulitis.
- * Competent to modify management in the presence of co-morbidity such as diabetes and vascular insufficiency
- * Recognise and manage complicated skin infections including gas forming organisms and necrotising infections

2. Manage patients presenting with an acute abdomen:

- * Competent to diagnose and manage patients presenting with an acute abdomen using appropriate investigations and supervise effective resuscitation
- * Manage the patient presenting with peritonitis including acute appendicitis, acute cholecystitis, perforated viscus (peptic ulcer, diverticular disease), acute pancreatitis and acute presentations of gynaecological disease
- * Manage the patient presenting with acute intestinal obstruction including small bowel obstruction (adhesional and strangulated abdominal wall hernia) and large bowel obstruction (neoplasm)
- * Competent to perform exploratory laparotomy and treat cause of acute abdominal presentation appropriately

3. Manage acute GI haemorrhage:

- * Be able to diagnose and manage the common causes of acute gastrointestinal haemorrhage and supervise effective resuscitation
- * Recognise the indications for appropriate endoscopic and radiological investigation and refer or undertake appropriately
- * Be familiar with the indications for surgical intervention and be competent to undertake appropriate procedures or refer onwards to other specialists if appropriate

4. Manage the patient with multiple injuries, including children:

- * Assess and resuscitate the patient with multiple injuries in accordance with the ATLS standards current at the time
- * Work appropriately as part of the trauma team, participating at a level appropriate to the situation either as member or leader.
- * Conduct the initial management of blunt and penetrating injuries (including gun-shot and knife) calling in other expertise as necessary.
- * Participate as an effective member of the major incident team as required.

5. Manage abdominal trauma

- * Diagnose and manage the patient with abdominal trauma including splenic, hepatic and pancreatic injuries
- * Able to manage appropriate investigation in such situations, involving other specialists as appropriate
- * Competent to perform exploratory and damage limitation laparotomy including being familiar with surgery for haemoperitoneum
- * Diagnose and manage the patient with possible injury to the urogenital tract, chest and vascular injury involving other specialists appropriately

Upper GI

1. Manage the patient presenting with upper gastrointestinal symptoms, including dysphagia and dyspepsia:

- * Competent to diagnose and manage common presentations of upper gastrointestinal disorders including gastro-oesophageal reflux, hiatus hernia and peptic ulceration
- * Competent to diagnose the common malignant conditions of the upper GI tract including oesophageal and gastric cancer
- * Be familiar with investigation and principles of management of benign and malignant upper gastrointestinal disorders including referral onwards to specialist and oncology colleagues

2. Manage the patient presenting with symptoms referable to the biliary tract, including jaundice:

- * Competent to diagnose and manage patients presenting with symptoms of gall-stone disease
- * Competent to diagnose and assess patients presenting with jaundice including being familiar with endoscopic and radiological investigation
- * Competent to diagnose and assess patients with malignant disorders including pancreatic cancer and hepatic metastases including referral onwards to specialist and oncology colleagues

Lower GI

1. Manage patients presenting with common benign anorectal disease:

- * Recognise the common benign conditions of the anus, perineum and lower rectum including haemorrhoids, fissure, anal fistula, prolapse and pilonidal sinus
- * Be familiar with the treatment of common benign anorectal conditions as outpatients or by appropriate surgery

2. Manage patients with symptoms of lower gastrointestinal disease such as change in bowel habit:

- * Competent to diagnose and manage patients presenting with a change in bowel habit including diverticular disease and colorectal neoplasia
- * Be able to manage appropriate radiological and endoscopic investigations involving other specialists as appropriate
- * Be familiar with principles of management of benign and malignant lower gastrointestinal disorders including referral onwards to specialist and oncology colleagues

Breast Disease

Manage the patient presenting with common breast conditions:

- * Be familiar with the common presentations of breast conditions including breast lump, pain, nipple discharge or infection
- * Recognise the role of triple assessment including clinical examination, radiology (ultrasound, mammography) and pathology (cytology and histology; needle aspiration or biopsy)
- * Be familiar with principles of management of benign and malignant breast disorders including referral onwards to specialist and oncology colleagues

Vascular Disease

1 Manage straightforward varicose veins:

- * Competent to evaluate and manage patients with uncomplicated varicose veins including non-invasive investigations
- * Able to treat either by outpatient techniques or by surgery

2. Recognise the acutely ischaemic limb:

- * Able to recognise a patient presenting with an acutely ischaemic limb and initiate appropriate management
- * Be familiar with appropriate investigations and principles of management

3. Manage abdominal aortic aneurismal disease

- * Able to recognise a patient presenting with abdominal aortic aneurismal disease and initiate appropriate management
- * Be familiar with appropriate investigations and principles of management

Endocrine

1. Understand the implications of endocrine and metabolic disorders for the management of general surgical patients

- * Be familiar with appropriate investigations and principles of management

2. Manage the complications of thyroid and parathyroid surgery in the emergency setting

- * Be familiar with appropriate investigations and principles of management of postoperative haemorrhage in the neck, hypocalcaemia, and thyroid storm

Transplantation

1. Principles of organ donation

- * Be familiar with the criteria for the diagnosis of brain death
- * Able to recognise the potential for organ donation and liaise with specialist colleagues appropriately

2. Management of renal failure

- * Competent to diagnose, assess and initially manage appropriately patients presenting with renal failure / anuria, involving other specialist colleagues as the situation requires
- * Understand the indications for treatment with haemodialysis or peritoneal dialysis
- * Competent to assess bladder function in those patients under consideration for renal transplantation

Key topics

Candidates sitting this examination would be expected to be competent in the management of the conditions outlined below. This represents the minimum standard that would be expected.

- * Treat patient with acute appendicitis from start to finish
- * Assessment, resuscitation and management of patients with acute abdomen
- * Recognition and management of severe and necrotising superficial infections
- * Recognise and treat strangulated hernia
- * Safely assess the multiply injured patient (includes ATLS certification)

- * Identify and manage the majority of abdominal injuries
- * Provision of specialist surgical support in the management of conditions affecting the reticulo-endothelial and haemopoetic systems
- * Recognise benign lesions of skin and subcutaneous tissues and treat these where appropriate.
- * Recognise and appropriately treat malignant skin lesions
- * Diagnosis and management, including operative management of primary and recurrent abdominal wall herniae
- * Diagnosis and management of perforated peptic ulcer
- * Endoscopic diagnosis of upper GI haemorrhage, endoscopic management of some cases, operative management of cases where endostasis has failed
- * Basic management of patients with oesophagogastric disorders, including motility disorders, diagnosis and assessment of malignancy of the oesophagus and stomach
- * Diagnosis and management of acute gallstone disease, including operation
- * Management of patients with straightforward hepatopancreatobiliary disorders eg gallstones. Diagnosis and investigation of malignancy of the biliary tract, pancreas and liver.
- * Diagnosis and the medical and surgical treatment of common benign anorectal diseases – Haemorrhoids, fissure, low fistula, pilonidal sinus
- * Appropriate diagnosis and emergency treatment of benign colon diseases – diverticular disease, volvulus, lower GI bleeding
- * Diagnosis and the medical and surgical treatment of colonic neoplasia.
- * Diagnosis of rectal cancer
- * Diagnosis and the emergency medical and surgical treatment of inflammatory bowel disease
- * Assess and manage acute breast infection
- * Assessment and primary management of varicose veins
- * Ability to assess published evidence in relational to clinical practice.

Index Procedures

In general surgery, and its subspecialties, there are procedures which are common and represent important areas of clinical experience. Candidates will be expected to be familiar with the groups of procedures outlined below. The level of knowledge expected is further described in the Topic Overview outlined in the relevant section of the Syllabus. These include:

General

- Hernia repair – all types
- Laparotomy for acute abdomen
- Blunt/penetrating abdominal trauma

Breast

- Diagnostic excision/Wide Local Excision(± Image guided)
- Mastectomy
- Sentinel lymph node biopsy
- Axillary clearance
- Techniques of breast reconstruction

Coloproctology

- Anterior resection
- Flexible sigmoidoscopy and/or Colonoscopy
- Fistula surgery
- Segmental colectomy
- Surgical treatment of haemorrhoids

Endocrine

- Thyroidectomy
- Parathyroidectomy
- Adrenal surgery

Hepatopancreatobiliary

- Cholecystectomy (both laparoscopic and open)
- Exploration CBD
- Liver resection
- Pancreatic resection

Oesophagogastric

- Oesophago-gastro-duodenoscopy
- Anti-reflux surgery (both laparoscopic and open)
- Gastrectomy
- Roux-en-Y reconstruction
- Oesophagogastrrectomy
- Bariatric surgery

General Surgery of Childhood

- Laparotomy for acute abdomen
- Orchidopexy
- Paediatric circumcision/prepuceplasty
- Paediatric hernia/hydrocele

Transplant

- Renal transplant
- Liver transplantation
- Vascular access surgery

Vascular

- Aortic aneurysm
 - Elective
 - Emergency
- Carotid endarterectomy
- Infra-inguinal bypass
- Emergency Lower Limb
 - Femoral Embolectomy
 - 4 compartment fasciotomy
- Re-do vascular surgery
- Varicose vein surgery
- Vascular access

STANDARDS FOR DEPTH OF KNOWLEDGE.

In the intermediate and final stages of surgical training the following methodology is used to define the relevant depth of knowledge required of the surgical trainee. Each topic within a stage has a competence level ascribed to it for knowledge ranging from 1 to 4:

1. knows of
2. knows basic concepts
3. knows generally
4. knows specifically and broadly

The appropriate depth and level of knowledge required for the early years of training is also defined where possible in exemplar texts and it is expected that trainees will achieve mastery to the depth within the texts.

STANDARDS FOR CLINICAL AND TECHNICAL SKILLS

The practical application of knowledge is evidenced through clinical and technical skills. Each topic within a stage has a competence level ascribed to it in the areas of clinical and technical skills ranging from 1 to 4:

1. has observed

Exit descriptor; at this level the trainee:

- Has adequate knowledge of the steps through direct observation.
- Demonstrates that he/she can handle instruments relevant to the procedure appropriately and safely.
- Can perform some parts of the procedure with reasonable fluency.

2. can do with assistance

Exit descriptor; at this level the trainee:

- Knows all the steps - and the reasons that lie behind the methodology.
- Can carry out a straightforward procedure fluently from start to finish.

- Knows and demonstrates when to call for assistance/advice from the supervisor (knows personal limitations).
3. can do whole but may need assistance
- Exit descriptor; at this level the trainee:
- Can adapt to well-known variations in the procedure encountered, without direct input from the trainer.
 - Recognises and makes a correct assessment of common problems that are encountered.
 - Is able to deal with most of the common problems.
 - Knows and demonstrates when he/she needs help.
 - Requires advice rather than help that requires the trainer to scrub.
4. competent to do without assistance, including complications

Exit descriptor, at this level the trainee:

- With regard to the common clinical situations in the specialty, can deal with straightforward and difficult cases to a satisfactory level and without the requirement for external input.
- The level at which one would expect a UK consultant surgeon to function.
- Is capable of supervising trainees.

Special Interest Topic Detail

SPECIAL INTEREST		
	SUB-CATEGORY	TOPIC
GENERAL SURGERY	Elective	Lesions of skin and subcutaneous tissue
		Abdominal wall
		Reticulo-endothelial system
		Venous thrombosis and embolism
		Genetic aspects
		Oncology
		Elective hernia
		Nutrition
		Outpatient skills
	Emergency	Superficial sepsis
		Acute Abdomen
		Acute intestinal obstruction
		Acute appendicitis
		Peritonitis
		Strangulated hernia
		Acute gynaecological disease
		Gastrointestinal bleeding
		Abdominal injuries
		Blunt and penetrating injuries
UPPER GI	Oesophagus	Gastro-oesophageal reflux disease
		Hiatus hernia
		Peptic stricture
		Achalasia
		Motility disorders
		Iatrogenic perforation
		Boerhaave's perforation
		Oesophageal cancer
		Varices
	Stomach	Gastric ulcer
		Duodenal ulcer
		Gastric and duodenal polyps
		Acute gastric perforation
		Acute upper GI haemorrhage
		Acute gastric dilatation
		Acute gastric volvulus
		Gastric carcinoma
		GIST
		Gastric lymphoma
		Morbid obesity
	Pancreatobiliary	Gall stones
		Acute pancreatitis
		Chronic pancreatitis
		Pancreatic cancer
		Cystic tumours
		Neuroendocrine tumours
		Intraductal Papillary Mucinous Neoplasms
		Pancreatic trauma

	Liver	Liver metastases
		Primary liver cancer
		Hilar tumours
		Benign tumours
		Liver trauma
	Surgical Nutrition	
LOWER GI	Benign anorectal	Haemorrhoids
		Anal fissure
		Abscess and fistula
		Hydradenitis Suppuritiva
		Pilonidal disease
		Anal stenosis
		Pruritus Ani
		Sexually transmitted disease
	Benign colorectal	Vascular malformations
		Diverticular disease
		Volvulus
		Rectal bleeding
		Massive lower GI bleeding
		Endometriosis
		Colon trauma
		Rectal Trauma
		Anal trauma
		Foreign bodies
	Colorectal neoplasia	Colorectal neoplasia
		Rectal cancer
		Recurrent disease
		Miscellaneous malignant lesions
		Anal canal neoplasia
		Anal neoplasia
		Presacral lesions
	Functional bowel disorders	Faecal incontinence
		Rectal prolapse
		Solitary rectal ulcer
		Constipation
		Irritable bowel syndrome
		Chronic rectal pain syndrome
	Inflammatory bowel disease	Inflammatory bowel disease - general
		Ulcerative colitis
		Crohn's disease
		Ischaemic colitis
		Radiation colitis
		Infective colitis
		Miscellaneous colitides
	Stomas	
BREAST - ONCOPLASTIC		Breast assessment
		Benign conditions
		Breast cancer
ENDOCRINE		Neck swellings

	Thyroid
	Parathyroid
	Adrenal
	Pancreatic endocrine
	MEN
VASCULAR	Superficial venous disease
	Deep venous disease
	Acute ischaemia
	Chronic ischaemia
	Upper limb ischaemia
	Aneurysmal disease
	Peripheral aneurysms
	Vascular access
	Renal vascular disease
	Extracranial vascular disease
	Mesenteric vascular disease
	Vascular trauma
	Hyperhydrosis
	Lymphoedema
	Interventional radiology
TRANSPLANTATION	Access for dialysis
	Organ retrieval
	Renal transplantation
	Paediatric renal transplantation
	Pancreatic transplantation
	Liver transplantation
GENERAL SURGERY OF CHILDHOOD	Abdominal pain
	Intussusception
	Child with vomiting
	Constipation
	Abdominal wall conditions
	Child with groin condition
	Urological conditions
	Head and neck swellings
	Trauma
	Miscellaneous
MILITARY SURGERY	
REMOTE AND RURAL	Ophthalmology
	Otolaryngology
	Dental
	Plastic Surgery
	Neurosurgery

TOPIC OVERVIEW

GENERAL SURGERY

Elective

LESIONS OF SKIN AND SUBCUTANEOUS TISSUES

OBJECTIVE

Recognise and appropriately manage malignant skin lesions.

Basal cell carcinoma: Diagnose and treat appropriately small basal cell carcinomas.

Malignant melanoma: Diagnose malignant melanoma and refer appropriately.

Squamous cell carcinoma: Diagnose squamous cell carcinoma and refer appropriately if large.

KNOWLEDGE		Standard
Basal cell carcinoma:	Anatomy	4
	Histopathology	4
	Natural history	4
Malignant melanoma:	Anatomy	4
	Histopathology	4
	Natural history	4
	Staging	4
Squamous cell carcinoma:	Anatomy	4
	Histopathology	4
	Natural history of malignant transformation in chronic ulcers	4
CLINICAL SKILLS		
Basal cell carcinoma:	Assess skin lesion	4
	Biopsy of large skin lesions to plan treatment	4
	Closure of large defects after excision by split skin grafts, full thickness grafts, flap closure	4
Malignant melanoma:	Assess skin lesion	4
	Indications for wider excision, lymph node biopsy, axillary or groin block dissection based on staging	4
Squamous cell carcinoma:	Assess skin lesion including incisional biopsy	4
TECHNICAL SKILLS		
Basal cell carcinoma:	Malignant skin lesion-excision biopsy SCC/BCC	4
Malignant melanoma:	Malignant skin lesion-treatment of melanoma	4
Squamous cell carcinoma	Malignant skin lesion-excision biopsy SCC/BCC	4

GENERAL SURGERY

Elective

ABDOMINAL WALL

OBJECTIVE

Management of abnormalities of the abdominal wall, excluding hernia.

Diagnosis: Ability to diagnose abdominal wall masses.

Treatment: Ability to manage abdominal wall masses.

KNOWLEDGE		Standard
Diagnosis:	Anatomy of the abdominal wall	4
	Pathology of the acute and chronic conditions; Haematoma, Sarcoma, Desmoid Tumours	4
Treatment:	Principles of management of desmoid tumours and sarcomas	4
CLINICAL SKILLS		
Diagnosis:	Ability to determine that a swelling is in the abdominal wall	4
	Initiate appropriate investigation	4
TECHNICAL SKILLS		
Conservative management of haematoma		4

GENERAL SURGERY

Elective

RETICULO- ENDOTHELIAL SYSTEM

OBJECTIVE

Knowledge of general and specialist surgical support needed in the management of conditions affecting the reticulo-endothelial and haemopoetic systems.

Lymphatic conditions: Knowledge of the general and specialist surgical support needed in the management of conditions affecting the lymphatic system. Simple lymph node biopsy.

Conditions involving the spleen: Knowledge of the general and specialist surgical support needed in the management of conditions affecting the spleen.

KNOWLEDGE		Standard
Lymphatic conditions:	Non Hodgkin's Lymphoma	4
	Lymphadenopathy	4
	Hodgkin's disease	4
	Staging classifications	4
Conditions involving the spleen:	Indications for elective splenectomy-haemolytic anaemia, ITP, Thrombocytopaenia, myeloproliferative disorders	4
	Indications for emergency splenectomy	4
	Sequelae of splenectomy	4
	Splenic conditions	4
	Thrombophilia	4
CLINICAL SKILLS		
Lymphatic conditions:	Planning appropriate diagnostic tests	4
	Liver biopsy	4
Conditions involving the spleen:	Planning appropriate treatment schedule in consultation with haematologist	4
TECHNICAL SKILLS		
Lymphatic conditions:	Biopsy-FNA	4
	Liver biopsy	4
	Lymph node biopsy-groin, axilla	4
Conditions involving the spleen:	Splenectomy	4

**VENOUS THROMBOSIS
AND EMBOLISM**

OBJECTIVE

Full understanding of prevention and management of Venous thrombosis and Embolism.

Coagulation: Understanding of the physiology and pathophysiology of coagulation.

Diagnosis: Knowledge and clinical skills in the common means of diagnosis of Venous thrombosis and Embolism

Treatment: Ability to treat Venous Thrombosis and Embolism.

Prophylaxis: Knowledge and clinical skills in common methods of prophylaxis against Venous thrombosis and Embolism.

KNOWLEDGE		Standard
Coagulation:	Clotting mechanism (Virchow Triad)	4
	Effect of surgery and trauma on coagulation	4
	Tests for thrombophilia and other disorders of coagulation	4
Diagnosis:	Methods of investigation for suspected thromboembolic disease	4
Treatment:	Anticoagulation, heparin and warfarin	4
	Role of V/Q scanning, CT angiography and thrombolysis	4
	Place of pulmonary embolectomy	4
Prophylaxis:	Detailed knowledge of methods of prevention, mechanical and pharmacological	4
CLINICAL SKILLS		
Coagulation	Recognition of patients at risk	4
Diagnosis:	Awareness of symptoms and signs associated with pulmonary embolism and DVT	4
Treatment:	Initiate and monitor treatment	4
Prophylaxis:	Awareness at all times of the importance of prophylaxis	4

GENETIC ASPECTS OF SURGICAL DISEASE

OBJECTIVES

Basic understanding of genetically determined diseases.

Endocrine: Basic understanding of the influence of genetics on endocrine disease.

Colorectal: Basic understanding of the influence of genetics on colorectal cancer development.

Breast: Basic understanding of the influence of genetics of breast cancer development.

Upper GI/HPB: Basic understanding of the influence of genetics in upper GI disease.

Clinical and molecular genetics: Basic understanding of the principles of genetics

KNOWLEDGE		Standard
Endocrine	Principal genetically influenced endocrine diseases and syndromes, MEN I, MEN II,	3
Thyroid, Parathyroid, Pancreas and adrenal		
Colorectal:	Outline knowledge of genetic changes which predispose to colorectal cancer including familial adenomatous polyposis, HNPCC and other polyposis syndromes	3
Breast:	Outline knowledge of genetic changes which predispose to breast cancer; BRCA1, BRCA2, P53	3
Upper GI/HPB:	Principal genetically influenced upper gastrointestinal diseases and syndromes, including duodenal polyposis, familial gastric cancer, Peutz-Jeger syndrome and polycystic disease of the liver	3
Clinical and molecular genetics:	Modes of inheritance	3
	Genetic Testing	3
	Screening	3
	Prophylactic intervention	3
	Therapeutic intervention	3
	Ethics	3

GENERAL SURGERY
Elective

ONCOLOGY FOR SURGEONS

OBJECTIVE

The basic understanding of the principles of Surgical Oncology
 The knowledge of risk factors and presentation of common cancers
 the knowledge and practice of the basics of management for common cancers
 The understanding of the ways of evaluating different cancer treatments

KNOWLEDGE		Standard
Cancer epidemiology and presentations	Aetiology and epidemiology of malignant disease	4
	Environmental and genetic factors in carcinogenesis	3
	Evaluate risk factors for malignant disease	3
	Terminology in epidemiology	3
Staging, prognosis and treatment planning	Prognosis and natural history of malignant disease	4
	Mechanisms and patterns in local, regional and distant spread	4
	Differences in course between hereditary and sporadic cancers	3
	Diseases predisposing to cancer e.g. inflammatory bowel disease	4
	Prognostic/predictive factors	4
	Genetics of hereditary malignant diseases	3
Cancer Biology	Cancer biology: cell kinetics, proliferation, apoptosis, balance between normal cell death/proliferation; angiogenesis and lymphangiogenesis; genome maintenance mechanisms to prevent cancer; intercellular and intermolecular adhesion mechanisms and signalling pathways; potential effects of surgery and surgery-related events on cancer biology (e.g. angiogenesis)	3
Tumour immunology	Tumour immunology: cellular and humoral components of the immune system; regulatory mechanisms of immune system; tumour antigenicity;	3

GENERAL SURGERY
Elective

	immune mediated antitumour cytotoxicity; effects of cytokines on tumours; effects of tumours on antitumour immune mechanisms; potential adverse effects of surgery, surgery-related events (e.g. blood transfusion) on immunologic responses	
Basic principles of cancer treatments and their evaluation	Basic principles of cancer treatment: surgery; radiotherapy; chemotherapy; endocrine therapy; immunotherapy	4
	Surgical pathology	4
	Evaluation of response to treatment(s)	4
	Adverse effects of treatment(s)	4
	Interactions of other therapies with surgery	4
	Ability to evaluate published clinical studies	4
	Relevance of statistical methods; inclusion/exclusion criteria of study objectives; power of the study; intention to treat; number needed to treat; relative and absolute benefit; statistical versus clinical significance	4
CLINICAL SKILLS		
Cancer epidemiology and presentations	Recognise symptoms and signs of cancer	4
	Initiate appropriate diagnostic and staging investigations for common solid tumours	4
Staging, prognosis and treatment planning	Perform prognostic assessment for patients with common solid tumours	4
	Define the role of surgery for given common solid tumours	4
	Participation in multi-disciplinary team discussion	4
	Undertake adequate pre-operative work-up	4
	Manage post-operative care	4
	Decide on and perform adequate follow-up	4
	Diagnose, score and treat side effects and complications of surgical treatment	4
	Recognise common side effects of other treatment modalities	4

GENERAL SURGERY
Elective

Basic principles of cancer treatments and their evaluation	The conduct of clinical studies	4
	Design and implement a prospective database (part of audit skills)	4
	Elementary principles in biostatistics and commonly used statistical methods (parametric versus non-parametric etc.)	4
	Ethical and legal aspects of research	4
	Present local audits; publication, presentation of case reports	4
TECHNICAL SKILLS		
Staging, prognosis and treatment planning	Malignant skin lesion-excision biopsy	4
	Malignant skin lesion-treatment of melanoma	4
	Lymph node biopsy-groin, axilla	4
	Central venous line insertion	4
	Laparotomy/laparoscopy	4

GENERAL SURGERY

Elective

ELECTIVE HERNIA

OBJECTIVE

Diagnosis + management, including operative management of primary and most recurrent abdominal wall hernia

KNOWLEDGE	Standard
Anatomy of inguinal region including inguinal canal, femoral canal, abdominal wall and related structures e.g. adjacent retroperitoneum and soft tissues.	4
Relationship of structure to function of anatomical structures.	4
Natural history of abdominal wall hernia including presentation, course and possible complications.	4
Treatment options	4
Current methods of operative repair including open mesh, laparoscopic mesh and posterior wall plication, to include the underlying principles, operative steps, risks, benefits, complications and process of each	4
CLINICAL SKILLS	
Diagnose and assess a patient presenting with abdominal wall hernia, including inguinal, femoral, epigastric, umbilical, paraumbilical, rare hernias such as obturator and Spigelian hernias and incisional hernias	4
Supervise the postoperative course in hospital and on follow-up	4
TECHNICAL SKILLS	
Hernia repair-femoral	4
Hernia repair-incisional	4
Hernia repair-incisional recurrent	4
Hernia repair-inguinal	4
Hernia repair-inguinal recurrent	4
Hernia repair-umbilical/paraumbilical	4
Hernia repair-epigastric	4

GENERAL SURGERY

Elective

NUTRITION

OBJECTIVE

Recognise the need for artificial nutritional support, assess whether this is appropriate and arrange treatment

KNOWLEDGE	Standard
Physiology of the GI tract	4
Assessment of nutritional status	4
Causation of nutritional deficiency	4
Metabolic requirements in health and disease	4
Physiology of nutritional support	4
Refeeding syndrome	3
Options for nutritional support Enteral vs parenteral	4
Indications for nutritional intervention	4
Management of fistulae	4
CLINICAL SKILLS	
Assessment of GI tract function	4
Assessment of nutritional status	4
Insertion of enteral feeding tubes	4
Care of the patient on enteral and parenteral support	4
Decision making	3
TECHNICAL SKILLS	
Formation of feeding enterostomy (open / lap)	4
Vascular access for parenteral feeding	4
PEG tube insertion / replacement	2

GENERAL SURGERY

Elective

OUTPATIENT SKILLS

OBJECTIVE

Assess individual outpatients adequately, manage a single outpatient clinic.

Individual patient assessment: Ability to assess individual outpatients.

Organise a consultant led OP service

KNOWLEDGE		Standard
Individual patient assessment:	Relevant anatomy, physiology and clinical knowledge for the system involved	4
Organisation of outpatient service:	Understanding of the administrative system of the hospital	3
	Relevant guidelines for disease management	4
CLINICAL SKILLS		
Individual patient assessment:	Focused history taking and examination.	4
	Organise appropriate investigations.	4
Management of an outpatient clinic:	Ability to allocate patients to appropriate staff members	4
	Ability to prioritise urgent patient investigations and operation	4
Organisation of outpatient service:	Prioritisation of patient appointments	4
TECHNICAL SKILLS		
Individual patient assessment:	Sigmoidoscopy-rigid.	4
	Haemorrhoids-OP treatment(injection/banding or infrared coagulation)	4

GENERAL SURGERY

Elective

LAPAROSCOPIC SURGERY

OBJECTIVE:

To understand the principles of laparoscopic surgery including technical aspects and common complications

KNOWLEDGE	Standard
Physiology of pneumoperitoneum	4
Technology of video imaging, cameras and insufflator	4
Laparoscopic instruments, clips, staplers and port types	4
Use and dangers of diathermy	4
Management of equipment failure	4
Anaesthetic problems in laparoscopic surgery	4
Informed consent for laparoscopic procedures	4
Recognition and management of laparoscopic complications	4
CLINICAL SKILLS	
Pre and postoperative management of laparoscopic cases	4
Port complications	4
TECHNICAL SKILLS	
Closed and open techniques for port insertion	4
Diagnostic laparoscopy	4
Laparoscopic suturing and knotting	4
Control of laparoscopic bleeding	4

GENERAL SURGERY

Emergency

SUPERFICIAL SEPSIS INCLUDING NECROTISING INFECTIONS

OBJECTIVE

Diagnosis and basic management of gas gangrene and other necrotising infections.

KNOWLEDGE		Standard
Infected sebaceous cyst / carbuncle	Natural history	4
	Bacteriology	4
	Associated medical conditions	4
Superficial abscess	Aetiology	4
	Natural history	4
	Bacteriology	4
Cellulitis	Aetiology	4
	Associated medical conditions	4
	Immunocompromised patients	4
	Bacteriology	4
	Antibiotic therapy	4
Infected ingrowing toenail / paronychia	Aetiology	4
	Bacteriology	4
	Atherosclerosis	4
	Diabetes	4
Gas gangrene and other Necrotising Infections		
Natural history		4
Vulnerable individuals		4
Associated medical conditions	Diabetes, atherosclerosis, Steroids and immunocompromised	4
Bacteriology and toxins		4
Mechanisms of septic shock		4
Appropriate antibiotic therapy		4
Necrotising fasciitis		4
CLINICAL SKILLS		
Infected sebaceous cyst / carbuncle	History and examination	4
	Medical management or diabetes periop	4
Superficial abscess	History and examination	4
Cellulitis	History and examination	4
	IV therapy	4
Infected ingrowing toenail / paronychia	History and examination	4
Warning signs of necrotising fasciitis	History and examination	4

GENERAL SURGERY
Emergency

TECHNICAL SKILLS		
Infected sebaceous cyst / carbuncle	Abscess drainage (not breast/anal/abdominal)	4
	Benign skin or subcutaneous lesion - excision biopsy	4
Superficial abscess	Abscess drainage (not breast/anal/abdominal)	4
Infected ingrowing toenail / paronychia	Nail avulsion / wedge resection / phenolisation	4
Radical excisional surgery	Fournier's gangrene, necrotising fasciitis, debridement	4

GENERAL SURGERY

Emergency

ACUTE ABDOMEN

OBJECTIVE

Assessment, resuscitation and management of patients with acute abdomen.

KNOWLEDGE	Standard
Abdominal anatomy	4
Aetiology	4
Pathophysiology of shock	4
Pathophysiology of peritonitis and sepsis	4
Differential Diagnosis	4
CLINICAL SKILLS	
History and examination	4
Resuscitation	4
Investigation	4
Indication for surgery	4
Ability to perform emergency laparotomy / laparoscopy	4
TECHNICAL SKILLS	
Central line insertion	4
Laparotomy	4
Laparoscopy	4

ACUTE INTESTINAL OBSTRUCTION

OBJECTIVE

Recognise and manage acute intestinal obstruction

KNOWLEDGE	Standard
Abdominal anatomy	4
Aetiology of intestinal obstruction	4
Pathophysiology of shock / sepsis	4
Differential diagnosis	4
Treatment options	4
CLINICAL SKILLS	
History and examination	4
Resuscitation	4
Investigation	4
Nutritional support	4
Ability to perform emergency laparotomy	4
TECHNICAL SKILLS	
Central line insertion	4
Laparotomy and division of adhesions	4
Small bowel resection	4

ACUTE APPENDICITIS

OBJECTIVE

Recognition and management of acute appendicitis

KNOWLEDGE	Standard
Anatomy of abdomen and pelvis	4
Natural history of appendicitis	4
Pathophysiology of appendicitis	4
Differential diagnoses	4
Effects of overwhelming sepsis and management	4
CLINICAL SKILLS	
History and examination	4
Investigation	4
Resuscitation	4
Postoperative management	4
TECHNICAL SKILLS	
Appendicectomy (Open/Lap)	4

PERITONITIS

OBJECTIVE

Recognition and management of peritonitis.

KNOWLEDGE		Standard
Anatomy of abdomen and pelvis		4
Differential diagnosis		4
Pathophysiology of shock	Septicaemic shock	4
Pathophysiology of peritonitis and sepsis	Intraperitoneal sepsis, generalised sepsis	4
Pathophysiology of obstruction/strangulation		4
Conditions which do not require surgery		4
CLINICAL SKILLS		
History and examination		4
Recognition of severity of disease		4
Investigation		4
Resuscitation	Including antibiotics, invasive monitoring	4
Treat symptoms		4
Recognition of success or failure of non-operative treatment		4
Ability to perform emergency laparotomy		4
Timing of intervention		4
Recognition and management of complications		4
TECHNICAL SKILLS		
Laparotomy / laparoscopy		4
Gastro / duodenal - perforated peptic ulcer closure		4
Hartmann's procedure		4
Cholecystectomy		4
Cholecystostomy		4

STRANGULATED HERNIA

OBJECTIVE

Recognise and treat most common strangulated hernia.

Strangulated inguinal hernia: Recognise and treat strangulated inguinal hernia.

Strangulated femoral hernia: Recognise and treat strangulated femoral hernia, including operative treatment

Strangulated incisional hernia: Recognise and treat strangulated incisional hernia, including operation .

Strangulated internal hernia: Recognise and treat strangulated hernia.

KNOWLEDGE		Standard
Strangulated inguinal hernia		
Anatomy	Inguinal and femoral canal	4
	Abdominal wall, retroperitoneum, soft tissues	4
Pathophysiology		4
Postoperative complications		4
Strangulated femoral hernia		
Anatomy	Inguinal and femoral canal	4
	Abdominal wall, retroperitoneum, soft tissues	4
Pathophysiology		4
Postoperative complications		4
Strangulated incisional hernia		
Anatomy of abdominal wall		4
Pathophysiology		4
Postoperative complications		4
Strangulated internal hernia		
Anatomy		4
Pathophysiology		4
Postoperative complications		4
CLINICAL SKILLS		
History and examination		4
Resuscitation		4
Investigation of possible strangulated hernia	Inguinal	4

GENERAL SURGERY
Emergency

	Femoral	4
	Incisional	4
	Internal	4
Operative strategy	Strangulated inguinal hernia	4
	Strangulated femoral hernia	4
	Strangulated incisional hernia	4
	Strangulated internal hernia	4
Postoperative complications		4
TECHNICAL SKILLS		
Small bowel resection		4
Repair - inguinal hernia		4
Repair - femoral hernia		4
Repair - incisional hernia		4
Repair internal hernia		4

ACUTE GYNAECOLOGICAL DISEASE

OBJECTIVE

To recognise, manage and appropriately refer acute gynaecological disease.

KNOWLEDGE		Standard
Pelvic inflammatory disease/Endometriosis/salpingitis		
	Anatomy of pelvis	4
	Physiology of pelvic organs	4
	Infective intra-abdominal conditions	4
	Appropriate management - antibiotics - referral pathway	4
Obstruction secondary to ovarian carcinoma		
	Anatomy of pelvis	4
	Physiology of pelvic organs	4
	Investigation of obstructed colon	4
	Management of ovarian carcinoma	2
Intra-abdominal haemorrhage from ruptured ovarian cyst / ectopic pregnancy		
	Anatomy of pelvis	4
	Physiology of pelvic organs	4
	Management of diagnosed condition	3
Iatrogenic injury		
	Anatomy of pelvis	4
	Physiology of pelvic organs	4
CLINICAL SKILLS		
Pelvic inflammatory disease/Endometriosis/salpingitis	History and examination	4
	Organise pelvic ultrasound / pregnancy test	4
	CT scan / tumour markers	4
	Ability to perform diagnostic laparoscopy / laparotomy	4
Obstruction secondary to ovarian carcinoma	History and examination	4

GENERAL SURGERY
Emergency

	Nonoperative management	3
	Perform emergency laparotomy	4
Intra-abdominal haemorrhage of gynaecology origin	History and examination	4
	Organise pelvic ultrasound and pregnancy test	4
	Ability to perform diagnostic laparotomy / laparoscopy	4
Iatrogenic injury	Recognition of nature and extent of injury	4
	Ability to perform emergency laparotomy	4
TECHNICAL SKILLS		
Laparotomy / laparoscopy		4
		4

GASTROINTESTINAL BLEEDING

OBJECTIVE

Assessment of all cases of gastrointestinal bleeding, management and referral to subspecialists as needed.

Blood loss and Hypotension: Understanding and management of blood loss.

Recognition of cause: Assessment of likely cause of GI bleeding and basic diagnostic endoscopy.

Treatment: Assessment and management of all cases of gastrointestinal bleeding with referral to subspecialist if needed.

Postoperative care: Post-op care of patients who have had surgery for GI bleeding.

Complications: Manage complications after GI bleeding

KNOWLEDGE		
Blood loss and hypotension	Physiology of hypovolaemia	4
	Coagulopathy	4
Recognition of all causes of GI bleeding		4
Treatment	Treatment options	4
	Indications for operation	4
	Role of endoscopic procedures and therapeutic radiology	4
Postoperative care	Fluid balance	4
Complications	Emergency complications	4
CLINICAL SKILLS		
Blood loss and hypotension	Resuscitation of hypotensive patient	4
	HDU care	4
Cause of bleeding	Clinical assessment	4
	Organise appropriate endoscopy or other investigation	4
Treatment	Appropriate surgery	4
Postoperative care	Analgesia	4
	Nutrition	4
	Recognition of complications	4
Complications	Rebleeding and postoperative problems - early recognition	4
	Treatment of complications	4
TECHNICAL SKILLS		
Diagnostic gastroscopy		3
Flexible sigmoidoscopy		3

ABDOMINAL INJURIES

OBJECTIVE

Identify and manage the majority of abdominal injuries including adults and children

KNOWLEDGE		Standard
Anatomy of abdomen		4
Aetiology		4
Pathophysiology of shock		4
Differences in Children		4
Principles of management of severely injured patients		4
Importance of mechanism of injury	Gun shot, stabbing, seat belt	4
Indications for uncross matched blood		4
Coagulopathy		4
Pathophysiology of peritonitis and sepsis		4
CLINICAL SKILLS		
History and examination		4
Resuscitation		4
Investigation		4
Appropriate use of CT and ultrasound		4
Indications for intervention		4
Recognition of injuries requiring other specialties		4
Management of hollow organ injury		4
TECHNICAL SKILLS		
Central line insertion		4
Diagnostic peritoneal lavage		4
Laparotomy / laparoscopy		4
Laparotomy - trauma		4
Liver trauma - debridement / packing		4
Pancreatectomy - distal		3
Splenectomy		4
Splenic repair		4
Management of hollow organ injury		4

BLUNT AND PENETRATING INJURIES

OBJECTIVE

Assessment and management of blunt and penetrating injury.

Closed thoracic injury: Assessment and emergency management of blunt injury of the thorax.

Penetrating thoracic injury: Assessment and emergency management of penetrating injury of the thorax.

Closed and penetrating abdominal injury: Assessment and management of blunt and penetrating abdominal injury.

Blunt and penetrating soft tissue and skeletal injury: Assessment and management of blunt and penetrating injury of the soft tissues and skeleton.

KNOWLEDGE

Standard

Closed thoracic injury	Anatomy	4
	Concept of low energy, high energy transfer injury	4
	Pathogenesis of shock	4
Penetrating thoracic injury	Anatomy	4
	Concept of low energy, high energy transfer injury	4
	Pathogenesis of shock	4
Closed and penetrating abdominal injury	Anatomy	4
	Concept of energy, low high energy transfer injury	4
	Pathogenesis of shock	4
Blunt and penetrating soft tissue and skeletal injury	Anatomy	4
	Concept of low energy, high energy transfer injury	4
	Pathogenesis of shock	4
CLINICAL SKILLS		
Closed thoracic injury	Assessment and initial management of multiply injured patient	4
	Recognise need for operative intervention and organise	4
	Understand indications for Emergency Room thoracotomy	3
	Postoperative management and recognition of complications	4
Penetrating thoracic injury	Assessment and initial management of multiply injured patient	4
	Recognise need for operative intervention and organise	4
	Recognise and treat sucking chest	4

GENERAL SURGERY
Emergency

	wound	
	Understand indications for ER thoracotomy	3
	Postoperative management and recognition of complications	4
Closed and penetrating abdominal injury	Assessment and initial management of multiply injured patient	4
	Recognise need for laparotomy and organise	4
	Arrest haemorrhage by suture/ligation/packing	4
	Indication for pelvic fixator	3
	Drains for biliary / pancreatic injury	3
	Management of retroperitoneal haematoma	4
	Postoperative management and recognition of complications	4
Blunt and penetrating soft tissue and skeletal injury	Assessment and initial management of multiply injured patient	4
	Arrest haemorrhage by pressure and tourniquet	4
	Appropriate immobilisation during assessment	4
	Recognition of major vascular trauma	4
	Assessment of ischaemic limb	4
	Recognition and treatment of acute compartment syndrome	4
	Femoral artery exposure	4
	Postoperative management and recognition of complications	4
TECHNICAL SKILLS		
Surgical airway management	Cricothyroidotomy	4
	Tracheostomy	4
Closed thoracic injury	Chest drain insertion	4
	Lateral thoracotomy	3
Penetrating thoracic injury	Chest drain insertion	4
	Lateral thoracotomy	3
Closed and penetrating abdominal injury	Diagnostic peritoneal lavage	4
	Laparotomy - trauma	4
	Splenectomy	4
	Small bowel resection	4
	Ileostomy - construction	4
	Colostomy - construction	4

VASCULAR TRAUMA

OBJECTIVE

Identification, assessment and management of injuries to blood vessels

KNOWLEDGE	Standard
Surgical anatomy	4
Mechanisms of vascular injury (Traumatic & Iatrogenic)	4
Pathophysiology of trauma and muscle ischaemia	4
Investigations	4
Multi-disciplinary approach to management	4
Fasciotomy	4
CLINICAL SKILLS	
Symptoms and signs of acute arterial / venous injury	4
Investigation	4
Manage multiply injured patient	4
Manage systemic effects of arterial trauma	4
TECHNICAL SKILLS	
Fasciotomy	4
Exposure and control of major vessels	4
Ligation	3
Lateral suture repair	3
End to end anastomosis	3

GASTRO-OESOPHAGEAL REFLUX DISEASE AND HIATUS HERNIA

OBJECTIVES

Assessment and management of patients presenting with GORD and hiatus hernia

KNOWLEDGE		Standard
Anatomy	Lower third of oesophagus; oesophageal sphincter	4
Pathophysiology	Acid or bile reflux; pH abnormalities; motility disorder	4
Pathology	Classification of oesophagitis	4
Complications	Barrett's metaplasia; stricture	4
CLINICAL SKILLS		
History and Examination		4
Investigation	Endoscopy, pH studies, Manometry	4
Decision making	Indications for surgery	3
Non operative options	Medical management; postural changes	4
Operative options	Indications for surgery; antireflux surgery - open or laparoscopic	3
Postoperative management		4
TECHNICAL SKILLS		
Endoscopy		2
Antireflux surgery		1
Revisional antireflux surgery		1

ACHALASIA AND MOTILITY DISORDERS

OBJECTIVES

Assessment and management of patients presenting with achalasia and motility disorders

KNOWLEDGE	Standard
Anatomy	4
Pathophysiology	4
Pathology	4
Complications	4
CLINICAL SKILLS	
History and Examination	4
Investigation	4
Decision making	2
Non operative options	3
Postoperative management	3
TECHNICAL SKILLS	
Endoscopy	2
Endoscopic dilation	1
Endoscopic botox injection	1
Laparoscopic cardiomyotomy	1

OESOPHAGEAL PERFORATION

OBJECTIVES

Ability to manage oesophageal emergencies.

Diagnosis: Diagnosis of oesophageal emergencies.

Management: Ability to manage rupture of the oesophagus

Operation: Operative treatment of rupture of the oesophagus

Post-operative care: Postoperative care of all patients with oesophageal emergencies.

KNOWLEDGE		Standard
Anatomy	Oesophagus and mediastinal relationships	4
Clinical presentation	Post-instrumentation, Boerhaave	4
Investigation	Contrast radiology	4
Pathophysiology	Mediastinitis	4
Complications	Empyema	4
CLINICAL SKILLS		
History and Examination		4
Investigation		4
Decision making		4
Non-operative treatment	Pleural drainage; antibiotics; nutritional support	3
Interventional options		2
Postoperative management		3
TECHNICAL SKILLS		
Endoscopy		1
Endoscopic interventions incl stent		1
Thoracotomy + lavage		1
Oesophagectomy		1

CARCINOMA OF THE OESOPHAGUS

OBJECTIVES

Assessment and management of patients presenting with oesophageal carcinoma

KNOWLEDGE		Standard
Applied Anatomy	Oesophageal and Oesophago-gastric junctional cancer; lymph node	4
Pathology	Epidemiology; aetiology : SCC or ACA	3
	Staging – TNM	3
Clinical Presentation	Dysphagia	4
Investigations	CT; Endoscopic ultrasound; PET-CT; laparoscopy	3
Complications		3
CLINICAL SKILLS		
History and Examination		4
Investigation	Endoscopy; CT; EUS; PET-CT; Laparoscopy	3
Decision making	Assessment of medical comorbidity for radical therapy	3
	Nutritional support	4
Chemotherapy	Neoadjuvant	2
Radiotherapy	Combination with chemotherapy	2
	Difference in treatment for SCC or ACA	2
Other non-operative treatment incl palliation	Palliative treatment; pain control	3
Indications for surgery		3
Postoperative management	Anastomotic leak; chylothorax; recurrent laryngeal nerve injury	2
Follow-up	Detection of recurrence	1
TECHNICAL SKILLS		
Endoscopy		2
Endoscopic palliation incl stenting		1
EMR		1
Open Oesophagogastrrectomy	2 field lymph node dissection	1
	Transthoracic	1
	Transhiatal	1
Minimally invasive oesophagectomy		1

OESOPHAGEAL VARICES

OBJECTIVES

Assessment and management of patients presenting with oesophageal varices

KNOWLEDGE		Standard
Anatomy		4
Pathophysiology	Aetiology of portal hypertension	4
Clinical presentation		4
Diagnosis		4
Treatment options	Endoscopic - injection, banding; Sengstaken tube	4
Indications for surgery		4
Complications	Child's classification of liver disease	4
CLINICAL SKILLS		
History and Examination		4
Investigation	Endoscopic assessment	4
Resuscitation		4
Decision making		3
Non-operative treatment	Sclerotherapy	2
Operative options	Porto-caval shunt; Oesophageal transection	2
Postoperative management		3
TECHNICAL SKILLS		
Endoscopy		2
Variceal injection		1
Balloon tamponade		3

ACUTE GASTRIC CONDITIONS

OBJECTIVES

Assessment and management of patients presenting with acute gastric dilatation and gastric volvulus

KNOWLEDGE		Standard
Applied Anatomy	Para-oesophageal hernia	4
Pathophysiology	Spontaneous; postsplenectomy	4
Clinical presentation		4
Complications	Gastric necrosis in volvulus	4
CLINICAL SKILLS		
History and Examination		4
Investigation	Contrast radiology; CT	4
Resuscitation		4
Decision making		3
Non-operative treatment	Naso-gastric aspiration; endoscopic therapy	3
Operative options		3
Postoperative management		3
TECHNICAL SKILLS		
Endoscopy		2
Gastrectomy		3

ACUTE GASTRIC HAEMORRHAGE

OBJECTIVES

Endoscopic diagnosis of upper GI haemorrhage, endoscopic management of most cases, operative management of cases where endostasis has failed, including management of complications.

Diagnosis: Endoscopic diagnosis of upper GI haemorrhage.

Management: Endoscopic management of most cases of upper GI haemorrhage, operative management where endostasis has failed.

Post-operative care: Post-operative care of all patients who have had surgery for UGI haemorrhage, including management of complications.

KNOWLEDGE		Standard
Anatomy		4
Pathophysiology	Aetiology	4
Differential diagnosis	Benign ulcer; cancer; vascular malformation; GIST	4
Complications	Hypovolaemic shock	4
CLINICAL SKILLS		
History and Examination		4
Investigation	Endoscopy	4
Resuscitation	Management of hypovolaemic shock	4
Decision making	Indications for intervention	4
Non-operative treatment	Injection sclerotherapy	3
Operative options		4
Postoperative management	Re-bleeding	3
TECHNICAL SKILLS		
Endoscopy		2
Endoscopic therapy		2
Gastrotomy + non-resectional treatment	Need for histology of ulcer edge	3
Partial gastrectomy		3
Total gastrectomy		2

ACUTE UPPER GI PERFORATION

OBJECTIVES

Diagnosis and management of perforated peptic ulcer.

Diagnosis and preop management: Diagnosis of perforated peptic ulcer and assess for operation.

Operative management: Operation for perforated peptic ulcer.

Postoperative management: postoperative management of patients who have had surgery for perforated peptic ulcer.

KNOWLEDGE		Standard
Anatomy		4
Pathophysiology		4
Differential diagnosis	Perforated gastric ulcer; duodenal ulcer; perforated cancer	4
Complications	Subphrenic abscess	4
CLINICAL SKILLS		
History and Examination	Assessment of peritonitis	4
Investigation		4
Resuscitation		4
Decision making	Medical comorbidity	4
Operative options	Local excision; resection	4
Postoperative management		4
TECHNICAL SKILLS		
Laparoscopy		4
Local treatment	Oversew, omental patch, local excision	4
Partial gastrectomy		3
Total gastrectomy		2

PEPTIC ULCER

OBJECTIVES

Assessment and management of patients with peptic ulceration and its complications

KNOWLEDGE		Standard
Clinical presentation		4
Pathophysiology		4
Complications	Perforation; bleeding; pyloric stenosis	4
CLINICAL SKILLS		
History and Examination		4
Investigation	OGD	4
Resuscitation		4
Decision making	Indications for operation	4
Operative options		4
Postoperative management		4
TECHNICAL SKILLS		
Endoscopy		2
Laparoscopy		4
Partial gastrectomy		3
Vagotomy and pyloroplasty		4

GIST

OBJECTIVES

Assessment and management of patients presenting with gastrointestinal stromal tumours

KNOWLEDGE		Standard
Applied Anatomy		4
Clinical presentation	Incidental; upper GI bleed	4
Pathology	"Benign" vs malignant	4
Complications		4
CLINICAL SKILLS		
History and Examination		4
Investigation	OGD +/- biopsy; CT	3
Decision making		3
Chemotherapy	Imatinib	2
Operative options	Resection; excision	3
Postoperative management		4
TECHNICAL SKILLS		
Endoscopy		2
Laparoscopy		4
Open excision		3
Small bowel resection		3
Partial gastrectomy		3
Total gastrectomy		2

GASTRIC CARCINOMA

OBJECTIVES

Assessment and management of patients presenting with gastric cancer

KNOWLEDGE		Standard
Applied Anatomy	Arterial blood supply; Lymph node tiers	4
Pathology	Epidemiology; Aetiology - Helicobacter	4
	Stage - TNM; pattern of spread	4
Clinical presentation	Early gastric cancer; advanced gastric cancer	4
Investigation	Endoscopy, CT, EUS, Laparoscopy	4
Complications		4
CLINICAL SKILLS		
History and Examination		4
Investigation	Endoscopy; CT; EUS; laparoscopy	4
Decision making	Comorbidity assessment; nutritional support	4
Chemotherapy	Neoadjuvant; adjuvant	2
Chemoradiotherapy	Adjuvant	2
Other non-operative treatment incl palliation	Chemotherapy; pain control	3
Interventional options	Endoscopic; resectional; extended lymphadenectomy	2
Postoperative management	Anastomotic leak; Duodenal stump disruption	3
TECHNICAL SKILLS		
Endoscopy		2
Endoscopic palliation incl stenting		2
EMR		1
Gastrojejunostomy		4
Palliative gastrectomy		3
D2 Subtotal gastrectomy		2
D2 Total gastrectomy		2

GASTRIC LYMPHOMA

OBJECTIVES

Assessment and management of patients presenting with gastric lymphoma

KNOWLEDGE		Standard
Applied Anatomy		4
Clinical presentation		4
Investigation	Endoscopy, CT, PET-CT	4
Pathology	Extranodal lymphoma.; MALToma	4
Complications	Perforation on treatment	4
CLINICAL SKILLS		
History and Examination		4
Investigation	Endoscopy; CT; PET-CT	4
Decision making		3
Medical management	Chemotherapy; Helicobacter eradication	3
Interventional options		3
Postoperative management		4
TECHNICAL SKILLS		
Endoscopy		2
Gastrojejunostomy		4
Total gastrectomy		2

ACUTE PANCREATITIS

OBJECTIVES

Diagnosis and management of most patients with acute pancreatitis with operation where appropriate.

KNOWLEDGE		Standard
Applied Anatomy		4
Pathophysiology	Severity of pancreatitis - scoring systems	4
Microbiology		4
Clinical presentation		4
Investigations	CT; ERCP	4
Complications		4
CLINICAL SKILLS		
History and Examination		4
Investigation		4
Resuscitation		4
Decision making		4
Non-operative treatment incl nutrition, use of antibiotics		4
Interventional options	ERCP, radiological drainage	4
Postoperative management	Abscess; Pseudocyst; Haemorrhage	4
TECHNICAL SKILLS		
Cholecystectomy		4
Cholangiography		4
Exploration CBD		4
ERCP		1
Necrosectomy		1
Pseudocyst drainage		1

PANCREATIC CANCER / PERIAMPULLARY CANCER

OBJECTIVES

Assessment and management of patients with pancreatic and ampullary cancer including cystic and neuroendocrine tumours

KNOWLEDGE		Standard
Applied Anatomy		4
Pathophysiology	Epidemiology; aetiology	4
	Stage - TNM	4
Pathology	Adenocarcinoma pancreas; ampullary, cystic, neuroendocrine	4
Clinical presentation	Painless Jaundice; Pain	4
Investigation	CT; MRCP; MRI; EUS	4
Complications		4
CLINICAL SKILLS		
History and Examination		4
Investigation	CT; MRCP; MRI; EUS	4
Decision making	Comorbidity; Nutritional assessment	4
Non-operative treatment incl palliation, nutrition		3
Interventional options eg ERCP, PTC		3
Postoperative management		4
TECHNICAL SKILLS		
Pancreaticoduodenectomy		1
Distal pancreatectomy		1
ERCP		1
Biliary bypass		4
Gastroenterostomy		4

PANCREATIC TRAUMA

OBJECTIVES

Assessment and management of patients with pancreatic trauma

KNOWLEDGE		Standard
Applied Anatomy		4
Pathophysiology		4
Clinical presentation	Blunt and abdominal injury	4
Investigation	CT; MRI	4
Complications	Pancreatic fistula	4
CLINICAL SKILLS		
History and Examination		4
Investigation	CT; MRI; Laparoscopy	4
Resuscitation		4
Decision making		4
Non-operative treatment		3
Interventional options eg ERCP, radiological drainage		3
Postoperative management	Pancreatic fistula; Nutritional support	4
TECHNICAL SKILLS		
Cholecystectomy		4
Debridement & drainage		3
Pancreaticojejunostomy		1
Pancreaticoduodenectomy		1
Distal pancreatectomy		1
Pseudocyst drainage		1

GALLSTONE DISEASE

OBJECTIVES

Diagnosis and management of acute gallstone disease, including operation.

Acute gall stone disease including acute cholecystitis, empyema, acute biliary colic and

cholangitis. Diagnosis and management of acute gallstone disease, including operation

KNOWLEDGE		Standard
Anatomy		4
Pathophysiology		4
Microbiology		4
Complications	Acute cholecystitis	4
	Empyema	4
	Mucocoele	4
	Acute pancreatitis	4
	Chronic cholecystitis	4
	Common bile duct stone	4
	Gall stone ileus	4
	Gall bladder cancer	4
Postoperative problems	Bile duct injury	4
CLINICAL SKILLS		
History and Examination	Acute / Emergency	4
	Elective	4
Investigation	U/S; ERCP; MRCP; CT	4
Resuscitation		4
Decision making		4
Non-operative treatment	ERCP; U/S Cholecystostomy	4
Operative options	Lap chole	4
Postoperative management		4
TECHNICAL SKILLS		
Cholecystectomy - lap / open		4
Operative Cholangiography		4
Cholecystostomy		4
Exploration CBD		3
Hepaticoducho-jejunostomy		1

LIVER METASTASES

OBJECTIVES

Assessment and management of liver metastases.

KNOWLEDGE		Standard
Applied Anatomy	Segments of the liver	4
Pathophysiology	Liver function	4
Pathology	Solitary; multiple; extrahepatic synchronous disease; colorectal; non-colorectal	4
Clinical Presentation		4
Complications		4
CLINICAL SKILLS		
History and Examination		4
Investigation	CT; PET-CT; MRI	4
Decision making including scheduling treatment		2
Non-operative treatment incl chemotherapy and biological therapy		2
Interventional options eg ablation	Radiofrequency ablation; resection	2
Postoperative management		4
TECHNICAL SKILLS		
Major hepatectomy	Intra-operative ultrasound	1
Extended hepatectomy		1
Peripheral wedge or segmental resection		1

Benign Surgical Liver Disease

OBJECTIVES

Assessment and management of non malignant surgical liver pathology including infection

KNOWLEDGE		Standard
Applied Anatomy	Segments of the liver	4
Pathophysiology	Liver function	4
Pathology	Liver Abscess, Cysts, Hydatid disease, Amoebiasis Haemangioma	4
Clinical Presentation		4
Complications		4
CLINICAL SKILLS		
History and Examination		4
Investigation	CT; PET-CT; MRI	4
Medical Treatment		3
Interventional options	Radiology Surgery	3
Complications		4
TECHNICAL SKILLS		
Surgical drainage	Intra-operative ultrasound	3
Peripheral wedge or segmental resection		1

LIVER TRAUMA

OBJECTIVES

Diagnosis and early management of liver trauma including laparotomy and liver packing or resection.

KNOWLEDGE		Standard
Applied Anatomy	Segments of the liver	4
Pathophysiology		4
Clinical Presentation	Blunt and penetrating injury	4
Investigations	CT	4
Complications	Haemobilia	4
CLINICAL SKILLS		
History and Examination		4
Investigation	CT	4
Resuscitation		4
Decision making		3
Non-operative treatment		3
Interventional options eg hepatic artery embolisation		2
Postoperative management		4
TECHNICAL SKILLS		
Salvage surgery eg packing		4
Debridement & hepatectomy		1

SURGICAL NUTRITION

OBJECTIVES

Recognise the need for artificial nutritional support, assess whether this is appropriate and manage treatment with enteral and parenteral nutrition

KNOWLEDGE	Standard
Physiology of the GI tract	4
Assessment of nutritional status	4
Causation of nutritional deficiency	4
Metabolic requirements in health and disease	4
Physiology of nutritional support	4
Refeeding syndrome	3
Options for nutritional support Enteral vs parenteral	4
Indications for nutritional intervention	4
Management of fistulae	4
CLINICAL SKILLS	
Assessment of GI tract function	4
Assessment of nutritional status	4
Insertion of enteral feeding tubes	4
Care of the patient on enteral and parenteral support	4
Decision making	3
TECHNICAL SKILLS	
Formation of feeding enterostomy (open / lap)	4
Vascular access for parenteral feeding	4
PEG tube insertion / replacement	2

MORBID OBESITY

OBJECTIVES

Basic management of the patient who is morbidly obese and an understanding of the surgical treatment of morbid obesity including early and late complications. A knowledge of the different patterns of presentations complications

KNOWLEDGE	Standard
Indications for surgery in morbid obesity	3
Therapeutic options for morbid obesity. Types of operations performed	3
General principles of the management of the obese patient perioperatively	3
Long term management of the bariatric patient post surgery	3
General Surgery for the super morbidly obese patient	3
CLINICAL SKILLS	
History and Examination of the Obese patient	4
Assessment of the post operative bariatric patient	3
Interpretation of Investigations in the obese patient	2
Management decisions for early and late complications of morbid obesity	3
Management of complications	3
TECHNICAL SKILLS	
Laparoscopic access in the morbidly obese	1
Aspiration of lap band port	1
Emergency release of lap band for slippage	1
Insertion of lap band	1
Repair of internal hernia after gastric bypass	1
Roux en Y gastric bypass	1
Revisional gastric surgery for obesity	1

HAEMORRHOIDS

OBJECTIVES

Competency in the diagnosis and all medical and surgical treatments for haemorrhoids.

KNOWLEDGE	Standard
Aetiology of internal and external haemorrhoids	4
Anatomical distinctions between internal and external haemorrhoids	4
Classifications for internal haemorrhoids	4
Indications, contraindications and complications of non-operative treatment of haemorrhoids – topical applications, stool modifiers/softeners	4
Indications, contraindications and complications of office treatment of haemorrhoids	4
Indications, contraindications and complications of operative treatment of haemorrhoids	4
CLINICAL SKILLS	
Diagnosis of thrombosed external haemorrhoids, internal haemorrhoids, skin tags	4
Diagnosis and treatment of complications of office treatment of haemorrhoids – pain, bleeding, sepsis,	4
Diagnosis and treatment of complications of operative treatment of haemorrhoids – urinary retention, haemorrhage, faecal impaction, infection stenosis, incontinence	4
TECHNICAL SKILLS	
Haemorrhoids-OP treatment(injection/banding/infrared)	4
Haemorrhoidectomy-operative	4
Haemorrhoidectomy-stapled	2

ANAL FISSURE

OBJECTIVE

Competency in the diagnosis and the medical and surgical treatment of anal fissure.

KNOWLEDGE	Standard
Aetiology of anal fissure	4
Anatomical location of a classic anal fissure	4
CLINICAL SKILLS	
Assessment of the signs and symptoms of anal fissure	4
Arrange the nonoperative management of anal fissure,	4
Indications, contraindications, and complications of surgical treatment	4
TECHNICAL SKILLS	
Lateral sphincterotomy	4

ABSCESS AND FISTULA

OBJECTIVE

Competency in the diagnosis and the medical and surgical treatment of abscess and fistula-in-ano.

Knowledge	Standard
The origin of cryptoglandular abscess and fistula	4
The natural history of surgically-treated anal abscess, including the risk of fistula formation	4
Complications resulting from abscess/fistula surgery: recurrence, incontinence	4
Operative strategy for anal fistula based on sphincter involvement/location	4
Clinical skills	
Differentiate cryptoglandular abscess and fistula from other causes	4
Assessment of abscess/fistula by techniques designed to elucidate pathological anatomy: Goodsall's rule and digital examination, fistulogram, injections, MRI, endoanal ultrasound	4
Management of anorectal abscess including preoperative and postoperative care and the appropriate procedure based on anatomical spaces	4
Technical Skills	
Fistula-in-ano-low-lay open	4
Fistula-in-ano Seton	4

PILONIDAL DISEASE

OBJECTIVE

Competency in the management of pilonidal disease.

KNOWLEDGE	Standard
Pathophysiology of pilonidal disease	4
CLINICAL SKILLS	
Assess the symptoms and signs of pilonidal disease: abscess, sinus	4
Perform surgical management of pilonidal disease	4
TECHNICAL SKILLS	
Pilonidal sinus-lay open	4
Pilonidal sinus-excision + suture	4
Pilonidal sinus-graft or flap	3

PRURITUS ANI

OBJECTIVE

Competency in the management of pruritis ani.

KNOWLEDGE	Standard
Aetiology and clinical presentation of pruritus ani	4
CLINICAL SKILLS	
Medical and surgical management of pruritus ani	4

VASCULAR MALFORMATIONS

OBJECTIVES

Management of patients with vascular malformations of the lower GI tract.

KNOWLEDGE	Standard
Aetiology of angiodysplasia	4
Classification of haemangiomas, their clinical presentations and predominant GI sites	4
CLINICAL SKILLS	
Assess clinical presentation and endoscopic findings of angiodysplasia	4
Arrange radiological and endoscopic evaluation of patients with haemangiomas	4
Manage the patient with regard to indications for intervention and the operative and nonoperative management of angiodysplasia	4

DIVERTICULAR DISEASE

OBJECTIVES

Ability to assess and manage diverticular disease

KNOWLEDGE	Standard
Aetiology of colonic diverticular disease	4
Incidence and epidemiology of colonic diverticular disease	4
Complications and classification of diverticular disease including : bleeding, perforation, abscess, fistula, stricture	4
CLINICAL SKILLS	
Recognise the clinical patterns (including right sided diverticular disease) presenting symptoms, physical findings and natural history of colonic diverticular disease	4
Arrange appropriate diagnostic studies in suitable sequence in the evaluation of both acute and chronic colonic diverticular disease	4
Medical and dietary management of colonic diverticular disease	4
Medical management for acute diverticulitis	4
Preoperative assessment including the indications for surgery, surgical procedures, and complications for acute diverticulitis	4
Choose appropriate surgical procedures including CT guided drainage for the management of acute diverticulitis	4
Perform appropriate resection for diverticular disease including consideration of the extent of resection, use of ureteric stents, and indications for diversion	4
Appropriate surgical procedures for dealing with complications (fistula, stricture, recurrent episodes) of acute diverticulitis	4
Patient selection and techniques for reversal of Hartmann's procedure including use of ureteric stents and indications for diversion	4
TECHNICAL SKILLS	
Colectomy-left	4
Colectomy-sigmoid	4
Colostomy-construction	4
Hartmann's procedure	4
Hartmann's reversal	3

VOLVULUS

OBJECTIVE

Competency in the diagnosis and treatment of colonic volvulus

KNOWLEDGE	Standard
Aetiology of volvulus of the colon	4
Incidence and epidemiology of volvulus of the colon	4
Complications of colonic volvulus including obstruction, ischaemia, perforation	4
CLINICAL SKILLS	
Recognise the clinical patterns, presenting symptoms, physical findings, and natural history of colonic volvulus based upon its site	4
Arrange diagnostic studies in appropriate sequence	4
Appropriate operative procedures for volvulus depending on site	4
TECHNICAL SKILLS	
Sigmoidoscopy-rigid	4
Sigmoidoscopy-flexible	2
Colonoscopy-diagnostic	2
Colonoscopy-therapeutic	2

MASSIVE LOWER GI BLEEDING

OBJECTIVE

Management of massive lower GI tract bleeding

KNOWLEDGE	Standard
Aetiology of massive lower GI bleeding	4
Utility, specificity and sensitivity of colonoscopy, angiography and radio-isotope scintigraphy in evaluation of lower GI bleeding	4
Angiographic treatment of lower GI bleeding	4
Evaluation of recurrent lower GI bleeding, including use of enteroscopy, exploratory laparotomy and intraoperative endoscopy	4
CLINICAL SKILLS	
Assess haemodynamic stability and outline a resuscitation plan	4
Practice an algorithm for the evaluation of lower GI bleeding including exclusion of coagulopathy, gastroscopy, colonoscopy, selective mesenteric angiography, radio-isotope scintigraphy, on table colonoscopy with antegrade lavage	4
Endoscopic treatment of lower GI bleeding including coagulation, injection therapy and laser ablation	2
Manage the patient with regard to the indications for surgery, appropriate surgical procedures and their possible complications based upon cause, location, patient age and medical condition	4
Perform intraoperative evaluation and management of persistent massive lower GI bleeding without an identified site	4
Manage postoperative lower GI bleeding	4
TECHNICAL SKILLS	
Colectomy-total+ileostomy	4
Colectomy-right	4
Colectomy-left	4
Colectomy-sigmoid	4
Colostomy-construction	4
Hartmann's procedure	4
Ileostomy-construction	4

COLON TRAUMA

OBJECTIVE

Competency in the appropriate diagnosis and treatment of colon trauma

KNOWLEDGE	Standard
Uses and limitations of the following imaging and diagnostic tests in the evaluation of abdominal trauma	
Plain abdominal films	4
Computed tomography scan	4
Ultrasound	4
Peritoneal lavage	4
CLINICAL SKILLS	
Manage the patient with abdominal trauma with understanding of the criteria for exploratory laparotomy, wound exploration, peritoneal lavage	4
Perform appropriate surgical management of colon trauma in the context of the severity of associated injuries and stability of medical condition	4
Manage a patient, either operatively or non-operatively with colonic trauma due to colonoscopic perforation or laparoscopic perforation	4
TECHNICAL SKILLS	
Colon-primary repair	4
Colectomy-right	4
Colectomy-left	4
Colectomy-sigmoid	4
Colectomy-transverse	4
Colectomy-total+ileostomy	4
Hartmann's procedure	4
Colostomy-construction	4
Ileostomy-construction	4

RECTAL TRAUMA

OBJECTIVE

Competency in the diagnosis and treatment of rectal trauma

KNOWLEDGE	Standard
Identify clinical situations requiring evaluation for rectal trauma	4
CLINICAL SKILLS	
Diagnosis of rectal trauma and associated injuries	4
Perform surgical management of rectal trauma including drainage, faecal diversion, rectal washout, primary repair	4
TECHNICAL SKILLS	
Colostomy-construction	4
Hartmann's procedure	4
Ileostomy construction	4
Rectum-operation for trauma	3

ANAL TRAUMA

OBJECTIVE

Competency in the management of anal trauma

CLINICAL SKILLS	Standard
Manage traumatic anal injuries by faecal diversion	4
TECHNICAL SKILLS	
Colostomy construction	4
Anal sphincter repair including postanal repair, anterior sphincter repair + rectocele repair	1

FOREIGN BODIES

OBJECTIVE

Manage patients with rectal foreign bodies

Clinical skills	Standard
Evaluate patients with rectal foreign bodies	4
Perform various methods of extraction of foreign bodies and assess the indications for surgery	4
Manage postextraction evaluation with regard to indications for inpatient observation and indications for surgery	3

COLORECTAL NEOPLASIA

OBJECTIVE

Epidemiology and aetiology of Colorectal Cancer and Polyps
Colorectal Cancer Screening
Clinical Presentation
Staging and Prognostic Factors
Management of Colon Cancer

KNOWLEDGE	Standard
Epidemiology and aetiology	4
Aetiology	4
Clinical presentation	4
Staging and prognostic factors	4
Management of colonic cancer	4
CLINICAL SKILLS	
History and examination	4
Diagnostic and staging investigations	4
Treatment planning	4
Treatment options	4
Complications and management	4
TECHNICAL SKILLS	
Colectomy-left	4
Colectomy-right	4
Colectomy-transverse	4
Colectomy-sigmoid	4
Colectomy-total+ileostomy	4
Colostomy-construction	4
Ileostomy-construction	4

RECTAL CANCER

OBJECTIVES

Management of patients with rectal cancer.

KNOWLEDGE	Standard
Presentation of rectal cancer	4
Diagnostic and staging approaches	4
Pathology and staging	4
Treatment options including local surgery, sphincter saving surgery, neoadjuvant and adjuvant therapy	4
Complications including emergency presentation	4
CLINICAL SKILLS	
History and examination	4
Investigation and staging	4
Treatment planning	3
Management of postoperative complications	4
TECHNICAL SKILLS	
Rectum-anterior resection	3
Rectum-AP excision	3

ANAL NEOPLASIA

OBJECTIVES

Ability to diagnose and manage anal neoplasia.

KNOWLEDGE	Standard
Epidermoid carcinoma:	3
Role of salvage therapies: abdominoperineal resection, chemotherapy, radiotherapy	3
CLINICAL SKILLS	
Treatment of epidermoid carcinomas based on stage: local excision, chemoradiotherapy, abdominoperineal resection, inguinal node management	2

LOWER GI
Functional bowel disorders

FAECAL INCONTINENCE

OBJECTIVES

Understanding of the causes, clinical findings

Understanding options for management

KNOWLEDGE	Standard
Clinical features	3
Pathophysiology	3
Investigations	3
Treatment options	3
CLINICAL SKILLS	
Take a directed history to differentiate types of incontinence	3
Perform a physical examination to differentiate types of incontinence	3
Outline a non-operative bowel management plan incorporating : dietary measures, medications, enemas, perineal skin care, anal plug	3
Select patients for temporary and permanent faecal diversion	3

LOWER GI

Functional bowel disorders

RECTAL PROLAPSE

OBJECTIVES

Competency in the management of all patients with rectal prolapse

KNOWLEDGE	Standard
The incidence, pathophysiology and epidemiology of rectal prolapse	4
Understand the perineal and abdominal surgical options for prolapse with the indications for each approach, complications, recurrence rate and functional results	3
CLINICAL SKILLS	
Identify the associated anatomical findings of rectal prolapse and its clinical presentation including functional disturbances and physical findings	4
Differentiate between mucosal prolapse, prolapsing internal haemorrhoids and rectal prolapse	4
Appropriate management of incarcerated and strangulated rectal prolapse	4
Manage constipation and incontinence in the context of rectal prolapse	4
Manage a patient with recurrent rectal prolapse	2
TECHNICAL SKILLS	
Prolapse-abdominal rectopexy	2
Prolapse-rectopexy + sigmoid resection	2
Prolapse-perineal repair	2

LOWER GI
Functional bowel disorders

SOLITARY RECTAL ULCER

OBJECTIVES

Ability to diagnose and manage solitary ulcer syndrome

KNOWLEDGE	Standard
Understand the associated pelvic floor disorder	2
CLINICAL SKILLS	
Recognise the clinical presentation, endoscopic and histological findings in a patient with solitary rectal ulcer	3
Utilise appropriate medical/surgical treatment options	2

LOWER GI

Functional bowel disorders

CONSTIPATION

OBJECTIVE

Investigation of patients with constipation and treatment of patients with non-specific constipation.

KNOWLEDGE	Standard
Normal colonic physiology	4
Definition of constipation and its epidemiology	4
Types and causes of constipation differential diagnosis in a patient with constipation	4
Non-surgical treatment options	4
Common causative factors for colonic pseudo-obstruction	4
CLINICAL SKILLS	
Take a directed history for a patient with constipation and perform a directed physical examination	4
Plan a treatment programme for a patient with constipation	4
Evaluate a patient with suspected colonic pseudo-obstruction	4
Manage a patient with colonic pseudo-obstruction	4

LOWER GI
Functional bowel disorders

IRRITABLE BOWEL SYNDROME

OBJECTIVE

To understand the management options in irritable bowel syndrome

KNOWLEDGE	Standard
Causes and clinical features	4
Management options	4
CLINICAL SKILLS	
Diagnostic features of irritable bowel syndrome	4

LOWER GI Inflammatory bowel disease

INFLAMMATORY BOWEL DISEASE - GENERAL

OBJECTIVES

History: Knowledge of the history of IBD

Aetiology: Knowledge of the aetiology of inflammatory bowel disease

Epidemiology: Knowledge of the epidemiology of inflammatory bowel disease

Clinical manifestations: Recognition of the clinical manifestations of inflammatory bowel disease and its severity.

Differential diagnosis: Competency in the diagnosis of inflammatory bowel disease.

KNOWLEDGE	Standard
Aetiology	4
Epidemiology	4
Clinical manifestations	4
Differential Diagnosis	4
Infective colitis	4
CLINICAL SKILLS	
Recognise and compare the clinical pattern, presenting symptoms, physical findings and natural history of ulcerative colitis and Crohn's disease	4
The extraintestinal manifestations of IBD	4
Diagnostic assessment for inflammatory bowel disease to exclude other colitides	4

LOWER GI Inflammatory bowel disease

ULCERATIVE COLITIS

OBJECTIVES

Medical management of ulcerative colitis

Surgical management of ulcerative colitis

KNOWLEDGE	Standard
Medical management	4
Cancer in Ulcerative Colitis	4
Surgical Management	4
CLINICAL SKILLS	
Recognise the presentation and manage proctitis, left-sided colitis, extensive colitis, severe acute colitis, toxic megacolon	4
Joint management of a patient unresponsive to initial treatment	4
Organise surveillance and interpret biopsy results of dysplasia	3
Indications and contraindications, operative technique, postoperative care, functional results, and complications of the operations for ulcerative colitis	4
Postoperative management	4
TECHNICAL SKILLS	
Colectomy-total+ileostomy	4
Colectomy-total+ileorectal anastomosis	4
Rectum-panproctocolectomy+ileostomy	3
Ileoanal anastomosis+creation of pouch	1

LOWER GI Inflammatory bowel disease

CROHNS DISEASE

OBJECTIVES

Medical management of Crohn's disease
Complications of Crohn's disease
Surgical management of Crohn's disease

KNOWLEDGE	Standard
Medical Management	4
Cancer in Crohn's Disease	4
Surgical Management	4
CLINICAL SKILLS	
Recognise and outline the management of the following complications of Crohn's disease: obstruction/stenosis, fistula, abscess, perforation, haemorrhage, toxic megacolon, severe acute colitis,	4
Treatment specific to the site of involvement in a patient with Crohn's disease	4
Medical management of a patient unresponsive to initial treatment	4
Organise surveillance and interpret biopsy results of dysplasia	3
Indications and contraindications, operative technique, postoperative care, functional results, risk of recurrence, and complications of operations for Crohn's disease	4
TECHNICAL SKILLS	
Colectomy-right	4
Colectomy-transverse	4
Colectomy-left	4
Colectomy-sigmoid	4
Colectomy-total+ileostomy	4
Colectomy-total+ileorectal anastomosis	4
Crohn's-ileocaecectomy	4
Strictureplasty-Crohn's	3
Rectum-panproctocolectomy+ileostomy	3

ISCHAEMIC COLITIS

OBJECTIVES

Competency in the management of ischaemic colitis

KNOWLEDGE	Standard
Vascular anatomy of the colon	4
The aetiology of acute colonic ischemia	4
CLINICAL SKILLS	
Recognise the clinical presentation of ischaemic colitis	4
Recognise the natural history, diagnosis, and be able to manage ischaemic colitis	4
Recognise and manage ischaemic colitis after abdominal aortic aneurysm repair	4

STOMAS

OBJECTIVES

Indications for stomas
Preoperative Evaluation for stomas
Stoma creation and closure
Postoperative Care
Complications
Stoma Management

KNOWLEDGE	Standard
Indication for stoma	4
Complications	4
Stoma management	4
Stoma Physiology	4
Patient Education and Counselling	4
CLINICAL SKILLS	
Preoperative evaluation	4
Stoma creation and closure	4
Postoperative Care	4
Complications	4
Stoma Management	4
Appropriately manage fluid and electrolyte abnormalities	4
TECHNICAL SKILLS	
Ileostomy-construction	4
Colostomy-construction	4
Ileostomy-closure	4
Colostomy-closure	4

PRINCIPLES OF BREAST DISEASE

OBJECTIVES

Understand principle features of breast anatomy, physiology
 Assess and manage patients presenting with breast symptoms
 Understand principles of management of breast cancer

KNOWLEDGE		Standard
Normal anatomy		4
Breast and endocrine physiology	Endogenous hormones	4
Breast assessment	Triple assessment	4
Pathology	Benign, malignant	4
Management including reconstructive surgery	Medical, Surgical, Radiotherapy	4
CLINICAL SKILLS		
History		4
Examination	Breast, nodal basin, relevant systems	4
Investigation	Triple assessment	4
	Imaging techniques	4
Multidisciplinary team working		4
TECHNICAL SKILLS		
Fine needle aspiration		4
Core biopsy		4
Punch biopsy		4
Breast lump excision - diagnostic/therapeutic		4
Simple mastectomy		4
Axillary surgery including sentinel node		3

NECK SWELLINGS

OBJECTIVE

Assessment and Management of Neck Swellings

KNOWLEDGE		Standard
Anatomy of triangles of neck	Submental, submandibular, anterior, posterior	4
Causes of enlargement of salivary glands / thyroid gland	Thyroglossal cyst, lymph nodes,	4
	Skin and soft tissue including branchial cyst	4
Investigation of neck swellings	Diagnostic imaging, ENT assessment, pathology and biochemistry	4
CLINICAL SKILLS		
History and examination of neck swellings		4
Investigation	Diagnostic imaging	4
	ENT assessment	4
	Pathology	4
	Biochemistry	4
TECHNICAL SKILLS		
Biopsy - FNA		4
Cervical lymph node biopsy		4

THYROID

OBJECTIVE

Investigation and perioperative management of thyroid swellings and thyrotoxicosis.

Preop assessment: diagnosis and assessment of thyroid swellings and thyrotoxicosis.

Operative management: operative management of thyroid swellings (benign and malignant) and thyrotoxicosis.

Post operative management: postoperative care after thyroid surgery.

KNOWLEDGE		Standard
Anatomy of the neck, in particular thyroid and parathyroid glands		4
Pathophysiology of thyroid swellings	Generalised/solitary; functioning/non-functioning	4
Benign disorders of thyroid growth	Diffuse enlargement, nodular disease	4
Disorders of thyroid function	Causes, Treatment options	4
Medical treatment of thyrotoxicosis		4
Thyroid malignancy	Differentiated, medullary, anaplastic, lymphoma	4
Principles of operation for thyroid swellings and thyrotoxicosis		4
Complications of thyroid surgery		4
Thyroid replacement therapy in benign disease		4
Follow up and non surgical management / treatment of thyroid malignancy		4
CLINICAL SKILLS		
History and examination		4
Investigations	Thyroid function, autoantibodies, FNA, Ultrasound, Isotope scan	4
Indications for surgery	Thyrotoxicosis, benign nodular disease, malignancy	4
Decisions for operative or non-operative management	Choice of operation	4
Postoperative management	Post-op bleeding, airway problems, hypercalcaemia	4
Diagnosis and management of recurrent thyroid disease	benign / malignant, MDT discussions	3
TECHNICAL SKILLS		
Thyroid lobectomy		4
Subtotal thyroidectomy		4
Total Thyroidectomy		4
Thyroidectomy - toxic goitre		3
Thyroidectomy - total + cervical node dissection	Central compartment and lateral compartments	2
Thyroid surgery - reoperation		1
Cervical approach to retrosternal goitre		2
Sternotomy for retrosternal goitre		1
Thymectomy - transcervical approach		1

PARATHYROID

OBJECTIVE

Assessment and treatment of disorders of parathyroid function.

Diagnosis /Assessment: Diagnosis and assessment of disorders of parathyroid function.

Operative Management: Understanding of the principles of surgery for disorders of parathyroid function including re-exploration of the neck

Post operative management: post operative management after parathyroid surgery.

KNOWLEDGE		Standard
Anatomy / embryology / pathophysiology		4
Hypercalcaemia	Causes	4
	Investigation	4
	Medical management	4
Hypocalcaemia	Causes	4
	Investigation	4
	Medical management	4
Causes of hyperparathyroidism	Primary, renal, MEN, persistent or recurrent carcinoma	4
Diagnosis, imaging and assessment		4
Indications for surgery		4
Surgical strategies for hyperparathyroidism		4
Complications of parathyroid surgery		4
CLINICAL SKILLS		
History and examination		4
Investigations	Biochemical, radiological	4
Selection for surgery		4
Surgical Options		4
		4
Postop complications	Bleeding, airway problems, hypocalcaemia	4
TECHNICAL SKILLS		
Parathyroidectomy		2
Parathyroid surgery - reoperation		1

ADRENAL

OBJECTIVE

Assessment and management of enlarged adrenal gland including operation.

Adrenal gland: diagnosis and assessment of adrenal swellings.

Adrenal Gland - Operative management: principles of operative management of adrenal swellings.

Adrenal Gland - postoperative management: basic postoperative management of patients who have had adrenalectomy.

KNOWLEDGE		Standard
Anatomy and physiology of adrenal		4
Causes of adrenal mass		4
Disorders of adrenal function	Hyperadrenalism	4
	Hypoadrenalism	4
Indications for surgery		4
Effect of hormone producing tumours in perioperative period		3
Different approaches to adrenal	Anterior, posterior, laparoscopic	3
Complications of adrenalectomy		3
CLINICAL SKILLS		
History and examination		4
Investigations	Biochemical, radiological	4
Selection for surgery		3
Preoperative preparation for hormone secreting tumours	Endocrinologist, Anaesthetist consultation	3
Postop management of acute adrenal insufficiency		4
Postoperative management of patients with hormone secreting tumours		3
Management of postop bleeding and infection		4
TECHNICAL SKILLS		
Adrenalectomy (Open/Laparoscopic)		1

**SUPERFICIAL
VENOUS DISEASE**

OBJECTIVES

Assessment and management of varicose veins,
recurrent veins and complications

KNOWLEDGE	Standard
Anatomy	4
Physiology	4
Pathology of venous incompetence	4
Complications	4
Recurrent varicose veins	4
CLINICAL SKILLS	
History	4
Examination	4
Investigation – venous duplex, venography, Plethysmography	4
Management options	4
Management of complications	4
TECHNICAL SKILLS	
Injection sclerotherapy	4
Endovascular ablation	3
Surgery including ligation, stripping, phlebectomy	4

DEEP VEIN DISEASE

OBJECTIVE

Assessment and management of deep venous insufficiency (incl DVT)

Deep Vein Thrombosis	
KNOWLEDGE	Standard
Anatomy of deep veins lower limb / pelvis	4
Pathophysiology of DVT	4
Management of uncomplicated DVT	4
Early / late complications of DVT	4
Prophylaxis	4
Indications for intervention	4
Treatment options	4
CLINICAL SKILLS	
History and examination	4
Investigations – duplex ultrasound & venography	4
Chronic deep venous insufficiency	
KNOWLEDGE	
Pathology of deep venous incompetence	4
Management options including conservative and surgical	4
CLINICAL SKILLS	
History	4
Examination	4
Investigation	4
Complications	4

ACUTE ISCHAEMIA

OBJECTIVE

Ability to recognise acute limb ischaemia and institute emergency management

KNOWLEDGE	Standard
Anatomy of arterial system	4
Pathophysiology	4
Investigations	4
Management	4
Pathophysiology of compartment syndrome	4
CLINICAL SKILLS	
History	4
Examination	4
Investigations	4
TECHNICAL SKILLS	
Surgical approaches to the arterial tree	4
Surgical control of upper and lower limb blood vessels	4
Embolectomy	4
Fasciotomy	4

CHRONIC ISCHAEMIA

OBJECTIVE

Management of the chronically ischaemic lower limb

KNOWLEDGE	Standard
Anatomy	4
Pathophysiology	4
Management – Atherosclerosis, diabetes and vasculitis	4
Detailed understanding of risk factors for PAD and how to modify them	4
CLINICAL SKILLS	
History and examination	4
Investigation	4
Management including selection for treatment	4
Complications	4
Rehabilitation	4
TECHNICAL SKILLS	
Amputation (above, below knee & digital)	4

UPPER LIMB ISCHAEMIA

OBJECTIVE

Ability to recognise and manage acute and chronic upper limb ischaemia

KNOWLEDGE	Standard
Anatomy	4
Aetiology including thoracic outlet syndrome	4
Pathology	4
Presentation	4
Management	4
CLINICAL SKILLS	
History and examination	4
Investigations (ultrasound, angiogram & ECHO)	4
Complications	4
TECHNICAL SKILLS	
Exposure of brachial artery and embolectomy	4

ANEURYSMAL DISEASE

OBJECTIVE

Assessment and management of aortic aneurysms

KNOWLEDGE	Standard
Anatomy	4
Pathophysiology	4
Investigation – elective & emergency	4
Treatment including open and endovascular surgery	4
Treatment complications	4
CLINICAL SKILLS	
History and examination	4
Assessment of co-morbidity	4
Investigations	4
Management including resuscitation and patient selection	4
Management of complications	4
TECHNICAL SKILLS	
Immediate aortic control (emergency setting)	3

PERIPHERAL ARTERY ANEURYSM

Objective

Understanding and management of aneurysms of peripheral and visceral arteries

KNOWLEDGE	Standard
Common types of aneurysms	4
CLINICAL SKILLS	
Diagnosis and treatment options	4

CAROTID ARTERY DISEASE

OBJECTIVE

Understanding the principles of carotid artery disease

KNOWLEDGE	Standard
Anatomy	4
Pathophysiology	4
Definition of TIA and differential diagnosis	4
Indications for investigation	4
Indications for conservative or surgical management	4
Carotid body tumours	4
CLINICAL SKILLS	
History, examination and investigations	4
Postop complications	4

MESENTERIC VASCULAR DISEASE

OBJECTIVE

Understanding and management of mesenteric ischaemia

KNOWLEDGE	Standard
Anatomy of mesenteric arterial and venous system	4
Pathophysiology	4
Presentation of acute and chronic mesenteric vascular disease	4
Investigation	4
Treatment options	4
Complications	4
CLINICAL SKILLS	
History and examination	4
Resuscitation	4
Investigations	4
Management	4
Complications including short bowel syndrome	4

HYPERHYDROSIS

OBJECTIVE

Understanding and management of hyperhidrosis

KNOWLEDGE	Standard
Pathophysiology	4
Presentation	4
Treatment options – conservative & surgical	4
CLINICAL SKILLS	
History and examination	4
Management strategy	4

LYMPHOEDEMA

OBJECTIVE

Understanding and management of lymphoedema

KNOWLEDGE	Standard
Pathophysiology	4
Clinical features	4
Complications	4
Investigation	4
Management – conservative & surgical	4
CLINICAL SKILLS	
History and examination	4
Investigation	4
Management	4

TRANSPLANTATION

RENAL TRANSPLANT

OBJECTIVE

Management of renal failure and options for renal replacement

KNOWLEDGE	Standard
Causes of acute (ARF) and chronic renal failure (CRF)	4
Pathophysiology of ARF & CRF	4
Treatment options	4
Complications	4
Indications for kidney transplantation	4
Immunology	3
Principles of pre and postop management	3
CLINICAL SKILLS	
Pre-op care	2
Postop care & complications	2

TRANSPLANTATION

ACCESS FOR DIALYSIS

OBJECTIVE

Understand approaches to dialysis

KNOWLEDGE	Standard
Principles of dialysis	3
Methods of dialysis	3
Vascular access	3
Preoperative and postoperative management	3
CLINICAL SKILLS	
Preop preparation including investigations	4
Fluid management	3
Drug therapy	3
Postop complications	3
TECHNICAL SKILLS	
Insert central venous dialysis catheter	4
Insert and remove peritoneal catheters	4
Construct a-v fistula	3

TRANSPLANTATION

LIVER TRANSPLANTATION

OBJECTIVE

Understand principles of liver transplantation

KNOWLEDGE	Standard
Causes of acute and chronic liver failure	4
Pathophysiology	4
Indications and contraindications	3
Immunology	3
Complications of liver transplantation	2

ABDOMINAL PAIN**OBJECTIVES**

Assess and manage a child with abdominal pain including appendicectomy.

KNOWLEDGE	Standard
Pattern of symptoms and relation to likely pathology and age of child	4
Differential diagnosis	4
Place and value of investigations	4
Place of operative intervention, and associated outcomes	4
CLINICAL SKILLS	
Ability to assess ill child	4
Ability to form a viable investigation and treatment plan	4
TECHNICAL SKILLS	
Appendicectomy	4
Laparotomy/laparoscopy	4

CHILD WITH GROIN CONDITION

OBJECTIVES

Assess and manage a child with common conditions of the groin and external genitalia

KNOWLEDGE	Standard
Developmental anatomy	4
Undescended testis	4
Inguinal Hernia	4
Hydrocoele	4
Penile inflammatory conditions	4
Acute scrotum	4
Natural history	4
Indications for and outcomes of surgery	4
CLINICAL SKILLS	
History and examination	4
Treatment plan	4
TECHNICAL SKILLS	
Preputial stretch/circumcision	4
Inguinal herniotomy	4
Hydrocoele repair	4
Acute scrotal exploration	4
Orchidopexy	3

INTUSSUSCEPTION**OBJECTIVE**

Assess and manage a child with intussusception including management with an expert radiologist and operation.

KNOWLEDGE	Standard
Pattern of symptoms and relation to likely pathology and age of child	4
Role of radiology both for diagnosis and interventional management	4
Differential diagnosis	4
CLINICAL SKILLS	
Ability to assess child and recognise severity of illness	4
Resuscitation	4
Multi-disciplinary management	4
TECHNICAL SKILLS	
Reduction of intussusception (radiological/surgical)	3

ABDOMINAL WALL CONDITIONS

OBJECTIVE

Assess and manage abdominal wall hernia

Knowledge	Standard
Developmental anatomy	4
Epigastric hernia	4
Umbilical hernia	4
Natural history	4
Indications for and outcomes of surgery	4
Clinical Skills	
History and examination	4
Treatment plan	4
Technical Skills	
Epigastric hernia repair	4
Umbilical hernia repair	4

TRAUMA

OBJECTIVE

Assess and manage a child with trauma.

Knowledge	Standard
Algorithms for assessment of trauma victims - primary survey	4
Algorithms for assessment of trauma victims - secondary survey	4
Likely effects of different types of trauma and relation to age of child	4
Awareness of non-accidental injury	4
Clinical Skills	
Assessment and resuscitation	4
Prioritise interventions	4
Multi-disciplinary management	4
Technical Skills	
Chest drain insertion	4
Central venous line insertion	4
Suprapubic catheter insertion	4

Professional Behaviour and Leadership

Professional Behaviour and Leadership Syllabus

The Professional Behaviour and leadership elements expected of candidates sitting this examination are mapped to the leadership curriculum as laid out by the Academy of Medical Royal Colleges (web link). The assessment of these areas is a thread running throughout this examination and is common to all disciplines of surgery.

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Category	<p>Good Clinical Care, to include:</p> <ul style="list-style-type: none"> • History taking (see GMP Domains: 1, 3, 4) • Physical examination (see GMP Domains: 1, 2,4) • Time management and decision making (see GMP Domains: 1,2,3) • Clinical reasoning (see GMP Domains: 1,2, 3, 4) • Therapeutics and safe prescribing (see GMP Domains: 1, 2, 3) • Patient as a focus of clinical care (see GMP Domains: 1, 3, 4) • Patient safety (see GMP Domains: 1, 2, 3) • Infection control (see GMP Domains: 1, 2, 3) 	Area 4.1
Objective	<p>To achieve an excellent level of care for the individual patient</p> <ul style="list-style-type: none"> • To elicit a relevant focused history • To perform focused, relevant and accurate clinical examination • To formulate a diagnostic and therapeutic plan for a patient based upon the clinic findings • To prioritise the diagnostic and therapeutic plan communicate a diagnostic and therapeutic plan appropriately <p>To prescribe, review and monitor appropriate therapeutic interventions relevant to clinical practice including non – medication based therapeutic and preventative indications</p> <p>To prioritise the patient's agenda encompassing their beliefs, concerns expectations and needs</p> <p>To prioritise and maximise patient safety:</p> <ul style="list-style-type: none"> • To understand that patient safety depends on <ul style="list-style-type: none"> ○ The effective and efficient organisation of care ○ Health care staff working well together ○ Safe systems, individual competency and safe practice • To understand the risks of treatments and to discuss these honestly and openly with patients • To use systematic ways of assessing and minimising risk • To ensure that all staff are aware of risks and work together to minimise risk <p>To manage and control infection in patients, including:</p> <ul style="list-style-type: none"> • Controlling the risk of cross-infection • Appropriately managing infection in individual patients • Working appropriately within the wider community to manage the risk posed by communicable diseases 	Area 4.1
Knowledge	<p>Patient assessment</p> <ul style="list-style-type: none"> • Knows likely causes and risk factors for conditions 	

	<p>relevant to mode of presentation</p> <ul style="list-style-type: none"> • Understands the basis for clinical signs and the relevance of positive and negative physical signs • Recognises constraints and limitations of physical examination • Recognises the role of a chaperone is appropriate or required • Understand health needs of particular populations e.g. ethnic minorities • Recognises the impact of health beliefs, culture and ethnicity in presentations of physical and psychological conditions <p>Clinical reasoning</p> <ul style="list-style-type: none"> • Interpret history and clinical signs to generate hypothesis within context of clinical likelihood • Understands the psychological component of disease and illness presentation • Test, refine and verify hypotheses • Develop problem list and action plan • Recognise how to use expert advice, clinical guidelines and algorithms • Recognise and appropriately respond to sources of information accessed by patients • Recognises the need to determine the best value and most effective treatment both for the individual patient and for a patient cohort <p>Record keeping</p> <ul style="list-style-type: none"> • Understands local and national guidelines for the standards of clinical record keeping in all circumstances • Understanding of the importance of high quality and adequate clinical record keeping and relevance to patient safety and to litigation • Understand the primacy for confidentiality <p>Patient safety</p> <ul style="list-style-type: none"> • Outline the features of a safe working environment • Outline the hazards of medical equipment in common use • Understand principles of risk assessment and management • Understanding the components of safe working practice in the personal, clinical and organisational settings • Outline local procedures and protocols for optimal practice e.g. GI bleed protocol, safe prescribing • Understands the investigation of significant events, serious untoward incidents and near misses <p>Infection control</p> <ul style="list-style-type: none"> • Understand the principles of infection control • Understands the principles of preventing infection in high risk groups 	Area 4.1
Skills	<p>Patient assessment</p> <ul style="list-style-type: none"> • Takes a history from a patient with appropriate use of standardised questionnaires and with appropriate input from other parties including family members, carers and other health professionals • Performs an examination relevant to the presentation 	

	<p>and risk factors that is valid, targeted and time efficient and which actively elicits important clinical findings</p> <ul style="list-style-type: none"> • Give adequate time for patients and carers to express their beliefs ideas, concerns and expectations • Respond to questions honestly and seek advice if unable to answer • Develop a self-management plan with the patient • Encourage patients to voice their preferences and personal choices about their care <p>Clinical reasoning</p> <ul style="list-style-type: none"> • Interpret clinical features, their reliability and relevance to clinical scenarios including recognition of the breadth of presentation of common disorders • Incorporates an understanding of the psychological and social elements of clinical scenarios into decision making through a robust process of clinical reasoning • Recognise critical illness and respond with due urgency • Generate plausible hypothesis(es) following patient assessment • Construct a concise and applicable problem list using available information • Construct an appropriate management plan in conjunction with the patient, carers and other members of the clinical team and communicate this effectively to the patient, parents and carers where relevant <p>Patient safety</p> <ul style="list-style-type: none"> • Recognise and practise within limits of own professional competence • Recognise when a patient is not responding to treatment, reassess the situation, and encourage others to do so • Ensure the correct and safe use of medical equipment • Improve patients' and colleagues' understanding of the side effects and contraindications of therapeutic intervention • Recognise and respond to the manifestations of a patient's deterioration or lack of improvement (symptoms, signs, observations, and laboratory results) and support other members of the team to act similarly <p>Infection control</p> <ul style="list-style-type: none"> • Recognise the potential for infection within patients being cared for • Counsel patients on matters of infection risk, transmission and control • Actively engage in local infection control procedures • Prescribe antibiotics according to local guidelines and work with microbiological services where appropriate • Recognise potential for cross-infection in clinical settings • Practice aseptic technique whenever relevant 	Area 4.1
Behaviour	<ul style="list-style-type: none"> • Shows respect and behaves in accordance with Good Medical Practice • Ensures that patient assessment, whilst clinically appropriate considers social, cultural and religious 	

	<p>boundaries</p> <ul style="list-style-type: none"> • Support patient self-management • Recognise the duty of the medical professional to act as patient advocate • Ability to work flexibly and deal with tasks in an effective and efficient fashion • Remain calm in stressful or high pressure situations and adopt a timely, rational approach • Show willingness to discuss intelligibly with a patient the notion and difficulties of prediction of future events, and benefit/risk balance of therapeutic intervention • Show willingness to adapt and adjust approaches according to the beliefs and preferences of the patient and/or carers • Be willing to facilitate patient choice • Demonstrate ability to identify one's own biases and inconsistencies in clinical reasoning • Continue to maintain a high level of safety awareness and consciousness • Encourage feedback from all members of the team on safety issues • Reports serious untoward incidents and near misses and co-operates with the investigation of the same. • Show willingness to take action when concerns are raised about performance of members of the healthcare team, and act appropriately when these concerns are voiced to you by others • Continue to be aware of one's own limitations, and operate within them • Encourage all staff, patients and relatives to observe infection control principles • Recognise the risk of personal ill-health as a risk to patients and colleagues in addition to its effect on performance 	
Examples and descriptors for candidates	<p>Patient assessment</p> <ul style="list-style-type: none"> • Undertakes patient assessment (including history and examination) under difficult circumstances. Examples include: <ul style="list-style-type: none"> ○ Limited time available (Emergency situations, Outpatients, ward referral) ○ Severely ill patients ○ Angry or distressed patients or relatives • Uses and interprets findings adjuncts to basic examination appropriately e.g. electrocardiography, spirometry, ankle brachial pressure index, fundoscopy, sigmoidoscopy • Recognises and deals with complex situations of communication, accommodates disparate needs and develops strategies to cope • Is sensitive to patients cultural concerns and norms • Is able to explain diagnoses and medical procedures in ways that enable patients understand and make decisions about their own health care. <p>Clinical reasoning</p> <ul style="list-style-type: none"> • In a complex case, develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence, institutes an appropriate investigative and therapeutic plan, seeks appropriate support from others and takes account of the patients wishes 	

	Patient safety <ul style="list-style-type: none"> Leads team discussion on risk assessment, risk management, clinical incidents Works to make organisational changes that will reduce risk and improve safety Promotes patients safety to more junior colleagues Recognises and reports untoward or significant events Undertakes a root cause analysis Shows support for junior colleagues who are involved in untoward events Infection control <ul style="list-style-type: none"> Performs complex clinical procedures whilst maintaining full aseptic precautions Manages complex cases effectively in collaboration with infection control specialists 	Area 4.1
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	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Category	Being a good communicator To include: <ul style="list-style-type: none"> Communication with patients (GMP Domains: 1, 3, 4) Breaking bad news (GMP Domains: 1, 3, 4) Communication with colleagues (GMP Domains: 1, 3) 	N/A
Objective	Communication with patients <ul style="list-style-type: none"> To establish a doctor/patient relationship characterised by understanding, trust, respect, empathy and confidentiality To communicate effectively by listening to patients, asking for and respecting their views about their health and responding to their concerns and preferences To cooperate effectively with healthcare professionals involved in patient care To provide appropriate and timely information to patients and their families Breaking bad news <ul style="list-style-type: none"> To deliver bad news according to the needs of individual patients Communication with Colleagues <ul style="list-style-type: none"> To recognise and accept the responsibilities and role of the doctor in relation to other healthcare professionals. To communicate succinctly and effectively with other professionals as appropriate To present a clinical case in a clear, succinct and systematic manner 	
Knowledge	Communication with patients <ul style="list-style-type: none"> Understands questioning and listening techniques Understanding that poor communication is a cause of complaints/ litigation Breaking bad news <ul style="list-style-type: none"> In delivering bad news understand that: <ul style="list-style-type: none"> The delivery of bad news affects the relationship with the patient Patient have different responses to bad news 	

	<ul style="list-style-type: none"> ○ Bad news is confidential but the patient may wish to be accompanied ○ Once the news is given, patients are unlikely to take in anything else ○ Breaking bad news can be extremely stressful for both parties ○ It is important to prepare for breaking bad news <p>Communication and working with colleagues</p> <ul style="list-style-type: none"> ● Understand the importance of working with colleagues, in particular: <ul style="list-style-type: none"> ○ The roles played by all members of a multi-disciplinary team ○ The features of good team dynamics ○ The principles of effective inter-professional collaboration ○ The principles of confidentiality 	
Skills	<p>Communication with patients</p> <ul style="list-style-type: none"> ● Establish a rapport with the patient and any relevant others (eg carers) ● Listen actively and question sensitively to guide the patient and to clarify information ● Identify and manage communication barriers, tailoring language to the individual patient and others and using interpreters when indicated ● Deliver information compassionately, being alert to and managing their and your emotional response (anxiety, antipathy etc) ● Use, and refer patients to appropriate written and other evidence based information sources ● Check the patient's understanding, ensuring that all their concerns/questions have been covered ● Make accurate contemporaneous records of the discussion ● Manage follow-up effectively and safely utilising a variety of methods (eg phone call, email, letter) ● Ensure appropriate referral and communications with other healthcare professional resulting from the consultation are made accurately and in a timely manner <p>Breaking bad news</p> <ul style="list-style-type: none"> ● Demonstrate to others good practice in breaking bad news ● Recognises the impact of the bad news on the patient, carer, supporters, staff members and self ● Act with empathy, honesty and sensitivity avoiding undue optimism or pessimism <p>Communication with colleagues</p> <ul style="list-style-type: none"> ● Communicate with colleagues accurately, clearly and promptly ● Utilise the expertise of the whole multi-disciplinary team ● Participate in, and co-ordinate, an effective hospital at night or hospital out of hours team ● Communicate effectively with administrative bodies and support organisations ● Prevent and resolve conflict and enhance collaboration 	

Behaviour	<p>Communication with patients</p> <ul style="list-style-type: none"> • Approach the situation with courtesy, empathy, compassion and professionalism • Demonstrate an inclusive and patient centred approach with respect for the diversity of values in patients, carers and colleagues <p>Breaking bad news</p> <ul style="list-style-type: none"> • Behave with respect, honesty and empathy when breaking bad news • Respect the different ways people react to bad news <p>Communication with colleagues</p> <ul style="list-style-type: none"> • Be aware of the importance of, and take part in, multi-disciplinary teamwork, including adoption of a leadership role • Foster an environment that supports open and transparent communication between team members • Ensure confidentiality is maintained during communication with the team • Be prepared to accept additional duties in situations of unavoidable and unpredictable absence of colleagues 	
Examples and descriptors for candidates	<ul style="list-style-type: none"> • Shows mastery of patient communication in all situations, anticipating and managing any difficulties which may occur • Able to break bad news in both unexpected and planned settings • Fully recognises the role of, and communicates appropriately with, all relevant team members • Predicts and manages conflict between members of the healthcare team • Beginning to take leadership role as appropriate, fully respecting the skills, responsibilities and viewpoints of all team members 	

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Category	• Teaching and Training (GMP Domains: 1, 3)	N/A
Objective	<ul style="list-style-type: none"> • To teach to a variety of different audiences in a variety of different ways • To assess the quality of the teaching • To train a variety of different trainees in a variety of different ways • To plan and deliver a training programme with appropriate assessments 	
Knowledge	<ul style="list-style-type: none"> • Understand relevant educational theory and principles relevant to medical education • Understand learning methods and effective learning objectives and outcomes • Differentiate between appraisal, assessment and performance review • Understand the appropriate course of action to assist a trainee in difficulty 	
Skills	<ul style="list-style-type: none"> • Critically evaluate relevant educational literature • Vary teaching format and stimulus, appropriate to situation and subject • Provide effective feedback and promote reflection • Deliver effective lecture, presentation, small group 	

	and bed side teaching sessions <ul style="list-style-type: none"> • Participate in patient education • Lead departmental teaching programmes including journal clubs • Recognise the trainee in difficulty and take appropriate action • Be able to identify and plan learning activities in the workplace 	
Behaviour	<ul style="list-style-type: none"> • In discharging educational duties respect the dignity and safety of patients at all times • Recognise the importance of the role of the physician as an educator • Balances the needs of service delivery with education • Demonstrate willingness to teach trainees and other health workers • Demonstrates consideration for learners • Acts to ensure equality of opportunity for students, trainees, staff and professional colleagues • Encourage discussions with colleagues in clinical settings to share understanding • Maintains honesty, empathy and objectivity during appraisal and assessment 	
Examples and descriptors for candidates	<ul style="list-style-type: none"> • Performs a workplace based assessment including giving appropriate feedback • Appraises a medical student, nurse or colleague • Plans, develops and delivers educational programmes with clear objectives and outcomes • Plans, develops and delivers an assessment programme to support educational activities 	

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Category	Keeping up to date and understanding how to analyse information Including <ul style="list-style-type: none"> • <i>Ethical research</i> (GMP Domains: 1) • Evidence and guidelines (GMP Domains: 1) • Audit (GMP Domains: 1, 2) • Personal development 	Area 1.3
Objective	<ul style="list-style-type: none"> • To understand the results of research as they relate to medical practise • To participate in medical research • To use current best evidence in making decisions about the care of patients • To construct evidence based guidelines and protocols • To complete an audit of clinical practice • To actively seek opportunities for personal development • To participate in continuous professional development activities 	Area 1.3 Area 1.3
Knowledge	<ul style="list-style-type: none"> • Understands the principles of research governance • Understands research methodology including qualitative, quantitative, bio-statistical and epidemiological research methods • Understands of the application of statistics as applied 	

	<p>to medical practice</p> <ul style="list-style-type: none"> • Understands the principles of critical appraisal • Understands levels of evidence and quality of evidence • Understands guideline development together with their roles and limitations • Understands the different methods of obtaining data for audit • Understands the role of audit in improving patient care and risk management • Understands the audit cycle • Understands the working and uses of national and local databases used for audit such as specialty data collection systems, cancer registries etc • To demonstrate knowledge of the importance of best practice, transparency and consistency 	Area 1.3
Skills	<ul style="list-style-type: none"> • Develops critical appraisal skills and applies these when reading literature • Devises a simple plan to test a hypothesis • Demonstrates the ability to write a scientific paper • Obtains appropriate ethical research approval • Uses literature databases • Contribute to the construction, review and updating of local (and national) guidelines of good practice using the principles of evidence based medicine • Designs, implements and completes audit cycles • To use a reflective approach to practice with an ability to learn from previous experience • To use assessment, appraisal, complaints and other feedback to discuss and develop an understanding of own development needs 	Area 1.3 Area 1.3
Behaviour	<ul style="list-style-type: none"> • Follows guidelines on ethical conduct in research and consent for research • Keep up to date with national reviews and guidelines of practice • Aims for best clinical practice at all times, responding to evidence based medicine while recognising the occasional need to practise outside clinical guidelines • Recognise the need for audit in clinical practice to promote standard setting and quality assurance • To be prepared to accept responsibility • Show commitment to continuing professional development 	Area 1.3 Area 1.3
Examples and descriptors for candidates	<ul style="list-style-type: none"> • Demonstrates critical appraisal skills in relation to the published literature • Demonstrates ability to apply for appropriate ethical research approval • Demonstrates knowledge of research organisation and funding sources • Demonstrates ability to write a scientific paper • Lead a complete clinical audit cycle including development of conclusions, the changes needed for improvement, implementation of findings and re-audit to assess the effectiveness of the changes • Seeks opportunity to visit other departments and learn from other professionals 	Area 1.3 Area 1.3

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Sub-category:	<p>Manager including</p> <ul style="list-style-type: none"> Self Awareness and self management (GMP Domains: 1) Team-working (GMP Domains: 1, 3) Leadership (GMP Domains: 1, 2, 3) Principles of quality and safety improvement (GMP Domains: 1, 3, 4) Management and health service structure (GMP Domains: 1) 	<p>Area 1.1 and 1.2 Area 2</p> <p>Area 4.2, 4.3, 4.4 Area 3</p>
Objective	<p>Self awareness and self management</p> <ul style="list-style-type: none"> To recognise and articulate one's own values and principles, appreciating how these may differ from those of others To obtain, value and act on feedback from a variety of sources To manage the impact of emotions on behaviour and actions To be reliable in fulfilling responsibilities and commitments to a consistently high standard To ensure that plans and actions are flexible, and take into account the needs and requirements of others <p>Team working</p> <ul style="list-style-type: none"> To identify opportunities where working with others can bring added benefits To work well in a variety of different teams and team settings by listening to others, sharing information, seeking the views of others, empathising with others, communicating well, gaining trust, respecting roles and expertise of others, encouraging others, managing differences of opinion, adopting a team approach <p>Leadership</p> <ul style="list-style-type: none"> To develop the leadership skills necessary to lead teams effectively. These include: Identification of contexts for change Application of knowledge and evidence to produce an evidence based challenge to systems and processes Making decision by integrating values with evidence Evaluating impact of change and taking corrective action where necessary <p>Principles of quality and safety improvement</p> <ul style="list-style-type: none"> To recognise the desirability of monitoring performance, learning from mistakes and adopting no blame culture in order to ensure high standards of care and optimise patient safety To critically evaluate services To identify where services can be improved To support and facilitate innovative service improvement <p>Management and health service culture</p> <ul style="list-style-type: none"> To actively contribute to plans which achieve service 	<p>Area 1.1 and 1.2</p> <p>Area 2</p> <p>Area 5</p> <p>Area 4.2, 4.3 and 4.4</p> <p>Area 3</p>

	goals <ul style="list-style-type: none"> • To manage resources effectively and safely • To manage people effectively and safely • To manage performance of themselves and others • To understand the management of local healthcare systems in order to be able to participate fully in managing healthcare provision 	
Knowledge	<p>Self awareness and self management</p> <ul style="list-style-type: none"> • Demonstrate knowledge of ways in which individual behaviours impact on others; • Demonstrate knowledge of personality types, group dynamics, learning styles, leadership styles • Demonstrate knowledge of methods of obtaining feedback from others • Demonstrate knowledge of tools and techniques for managing stress • Demonstrate knowledge of the role and responsibility of occupational health and other support networks • Demonstrate knowledge of the limitations of self professional competence <p>Team working</p> <ul style="list-style-type: none"> • Outline the components of effective collaboration and team working • Demonstrate knowledge of specific techniques and methods that facilitate effective and empathetic communication • Demonstrate knowledge of techniques to facilitate and resolve conflict • Describe the roles and responsibilities of members of the multidisciplinary team • Outline factors adversely affecting a doctor's and team performance and methods to rectify these • Demonstrate knowledge of different leadership styles <p>Leadership</p> <ul style="list-style-type: none"> • Demonstrate knowledge of patient outcome reporting systems within surgery, and the organisation and how these relate to national programmes. • Understand how decisions are made by individuals, teams and the organisation • Understand effective communication strategies within organisations • Demonstrate knowledge of impact mapping of service change, barriers to change, qualitative methods to gather the experience of patients and carers <p>Quality and safety improvement</p> <ul style="list-style-type: none"> • Understand the elements of clinical governance and its relevance to clinical care • Understands significant event reporting systems relevant to surgery • Understands the importance of evidence-based practice in relation to clinical effectiveness • Understand risks associated with the surgery including mechanisms to reduce risk • Outline the use of patient early warning systems to detect clinical deterioration • Keep abreast of national patient safety initiatives • Understand quality improvement methodologies including feedback from patients, public and staff 	<p>Areas 1.1 and 1.2</p> <p>Area 2</p> <p>Area 4.2, 4.3, 4.4</p>

	<ul style="list-style-type: none"> • Understand the role of audit, research, guidelines and standard setting in improving quality of care • Understand methodology of creating solutions for service improvement • Understand the implications of change 	
Skills	<p>Self awareness and self management</p> <ul style="list-style-type: none"> • Demonstrate the ability to maintain and routinely practice critical self awareness, including able to discuss strengths and weaknesses with supervisor, recognising external influences and changing behaviour accordingly • Demonstrate the ability to show awareness of and sensitivity to the way in which cultural and religious beliefs affect approaches and decisions, and to respond respectfully • Demonstrate the ability to recognise the manifestations of stress on self and others and know where and when to look for support • Demonstrate the ability to □ balance personal and professional roles and responsibilities, prioritise tasks, having realistic expectations of what can be completed by self and others <p>Team working</p> <ul style="list-style-type: none"> • Preparation of patient lists with clarification of problems and ongoing care plan • Detailed hand over between shifts and areas of care • Communicate effectively in the resolution of conflict, providing feedback • Develop effective working relationships with colleagues within the multidisciplinary team • Demonstrate leadership and management in the following areas: <ul style="list-style-type: none"> ○ Education and training of junior colleagues and other members of the team ○ Deteriorating performance of colleagues (e.g. stress, fatigue) ○ Effective handover of care between shifts and teams • Lead and participate in interdisciplinary team meetings • Provide appropriate supervision to less experienced colleagues • Timely preparation of tasks which need to be completed to a deadline <p>Leadership</p> <ul style="list-style-type: none"> • Identify trends, future options and strategy relevant to surgery • Compare and benchmark healthcare services • Use a broad range of scientific and policy publications relating to delivering healthcare services • Prepare for meetings by reading agendas, understanding minutes, action points and background research on agenda items • Work collegiately and collaboratively with a wide range of people outside the immediate clinical setting • Evaluate outcomes and re-assess the solutions through research, audit and quality assurance activities • Understand the wider impact of implementing change 	<p>Area 1.2 and 1.2</p> <p>Area 2</p> <p>Area 5</p>

	<p>in healthcare provision and the potential for opportunity costs</p> <p>Quality and safety improvement</p> <ul style="list-style-type: none"> • Adopt strategies to reduce risk e.g. Safe surgery • Contribute to quality improvement processes e.g. <ul style="list-style-type: none"> ○ Audit of personal and departmental performance ○ Errors / discrepancy meetings ○ Critical incident and near miss reporting ○ Unit morbidity and mortality meetings ○ Local and national databases • Maintenance of a personal portfolio of information and evidence • Creatively question existing practise in order to improve service and propose solutions <p>Management and health service structures</p> <ul style="list-style-type: none"> • Manage time and resources effectively • Utilise and implement protocols and guidelines • Participate in managerial meetings • Take an active role in promoting the best use of healthcare resources • Work with stakeholders to create and sustain a patient-centred service • Employ new technologies appropriately, including information technology • Conduct an assessment of the community needs for specific health improvement measures 	<p>Area 4.2, 4.3, 4.4</p> <p>Area 3</p>
Behaviour	<p>Self awareness and self management</p> <ul style="list-style-type: none"> • To adopt a patient-focused approach to decisions that acknowledges the right, values and strengths of patients and the public • To recognise and show respect for diversity and differences in others • To be conscientious, able to manage time and delegate • To recognise personal health as an important issue <p>Team working</p> <ul style="list-style-type: none"> • Encourage an open environment to foster and explore concerns and issues about the functioning and safety of team working • Recognise limits of own professional competence and only practise within these. • Recognise and respect the skills and expertise of others • Recognise and respect the request for a second opinion • Recognise the importance of induction for new members of a team • Recognise the importance of prompt and accurate information sharing with a patients own doctors following hospital discharge <p>Leadership</p> <ul style="list-style-type: none"> • Demonstrate compliance with national guidelines that influence healthcare provision • Articulate strategic ideas and use effective influencing skills 	<p>Area 1.1 and 1.2</p> <p>Area 2</p> <p>Area 5</p>

	<ul style="list-style-type: none"> • Understand issues and potential solutions before acting • Appreciate the importance of involving the public and communities in developing health services • Participate in decision making processes beyond the immediate clinical care setting • Demonstrate commitment to implementing proven improvements in clinical practice and services • Obtain the evidence base before declaring effectiveness of changes <p>Quality and safety improvement</p> <ul style="list-style-type: none"> • Participate in safety improvement strategies such as critical incident reporting • Develop reflection in order to achieve insight into own professional practice • Demonstrates personal commitment to improve own performance in the light of feedback and assessment • Engage with an open no blame culture • Respond positively to outcomes of audit and quality improvement • Co-operate with changes necessary to improve service quality and safety <p>Management and health service structures</p> <ul style="list-style-type: none"> • Recognise the importance of equitable allocation of healthcare resources • Recognise the role of doctors as active participants in healthcare systems • Respond appropriately to own health service objectives and targets and take part in the development of services • Recognise the role of patients and carers as active participants in healthcare systems and service planning • Show willingness to improve managerial skills (e.g. management courses) and engage in management of the service 	<p>Area 4.2, 4.3, 4.4</p> <p>Area 3</p>
Examples and descriptors for candidates	<p>Self awareness and self management</p> <ul style="list-style-type: none"> • Participates in case conferences as part of multidisciplinary and multi agency team • Responds to service pressures in a responsible and considered way • Liaises with colleagues in the planning and implementation of work rotas <p>Team working</p> <ul style="list-style-type: none"> • Discusses problems within a team and provides an analysis and plan for change • Works well in a variety of different teams • Shows the leadership skills necessary to lead the multidisciplinary team • Beginning to leads multidisciplinary team meetings <ul style="list-style-type: none"> ○ Promotes contribution from all team members ○ Fosters an atmosphere of collaboration ○ Ensures that team functioning is maintained at all times. ○ Recognises need for optimal team dynamics ○ Promotes conflict resolution • Recognises situations in which others are better equipped to lead or where delegation is appropriate 	<p>Area 1.1 and 1.2</p> <p>Area 2</p>

	<p>Leadership</p> <ul style="list-style-type: none"> • Shadows own health service managers • Attends multi-agency conference • Uses and interprets departments performance data and information to debate services • Participates in clinical committee structures within an organisation <p>Quality and safety improvement</p> <ul style="list-style-type: none"> • Able to define key elements of clinical governance • Demonstrates personal and service performance • Designs audit protocols and completes audit cycle • Identifies areas for improvement and initiates improvement projects • Supports and participates in the implementation of change • Leads in review of patient safety issue • Understands change management <p>Management and Health Care Structure</p> <ul style="list-style-type: none"> • Can describe in outline the roles of primary care, including general practice, public health, community, mental health, secondary and tertiary care services within own healthcare system • Participates fully in clinical coding arrangements and other relevant local activities • Participate in team and clinical directorate meetings including discussions around service development • Can discuss the most recent guidance from the relevant local health regulatory agencies in relation to the surgical specialty • Can describe the local structure for health services and how they relate to regional or devolved administration structures • Discusses funding allocation processes from central government in outline and how that might impact on the local health organisation 	<p>Area 5</p> <p>Area 4.2, 4.3, 4.4</p> <p>Area 3</p>
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	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Sub-category:	Promoting good health	
Objective	<ul style="list-style-type: none"> • To demonstrate an understanding of the determinants of health and public policy in relation to individual patients • To promote supporting people with long term conditions to self-care • To develop the ability to work with individuals and communities to reduce levels of ill health and to remove inequalities in healthcare provision • To promote self care 	N/A

Knowledge	<ul style="list-style-type: none"> • Recognises the agencies that can provide care and support out with the hospital • Understand the factors which influence the incidence and prevalence of common conditions including psychological, biological, social, cultural and economic factors • Understand the role of screening programmes • Demonstrate knowledge of the determinants of health worldwide and strategies to influence policy relating to health issues • Outline the major causes of global morbidity and mortality and effective, affordable interventions to reduce these 	
Skills	<ul style="list-style-type: none"> • Adapts assessment and management accordingly to the patients social circumstances • Ensures appropriate equipment and devices are discussed and where appropriate puts the patient in touch with the relevant agency • Identifies opportunities to promote change in lifestyle and to prevent ill health • Counsels patients appropriately on the benefits and risks of screening and health promotion activities 	
Behaviour	<ul style="list-style-type: none"> • Recognises the impact of long term conditions on the patient, family and friends • Show willingness to maintain a close working relationship with other members of the multi-disciplinary team, primary and community care • Recognise and respect the role of family, friends and carers in the management of the patient with a long term condition • Encourage where appropriate screening to facilitate early intervention 	
Examples and descriptors for candidates	<ul style="list-style-type: none"> • Demonstrates awareness of management of long term conditions • Develops management plans in partnership with the patient that are pertinent to the patients long term condition • Provide information to an individual about a screening programme offering specific guidance in relation to their personal health and circumstances concerning the factors that would affect the risks and benefits of screening to them as an individual. 	

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Sub-category:	<i>Probity and Ethics</i> To include <ul style="list-style-type: none"> • Acting with integrity • Medical Error • Medical ethics and confidentiality • Medical consent • Legal framework for medical practise 	Area 1.4
Objective	<ul style="list-style-type: none"> • To uphold personal, professional ethics and values, taking into account the values of the organisation and the culture and beliefs of individuals • To communicate openly, honestly and inclusively • To act as a positive role model in all aspects of 	Area 1.4

	<p>communication</p> <ul style="list-style-type: none"> • To take appropriate action where ethics and values are compromised • To recognise and respond the causes of medical error • To know, understand and apply appropriately the principles, guidance and laws regarding medical ethics and confidentiality as they apply to surgery • To understand the necessity of obtaining valid consent from the patient and how to obtain • To recognise, analyse and know how to deal with unprofessional behaviours in clinical practice, taking into account local and national regulations • Understand ethical obligations to patients and colleagues • To appreciate an obligation to be aware of personal good health 	
Knowledge	<ul style="list-style-type: none"> • Understand local complaints procedure • Recognise factors likely to lead to complaints • Understands the differences between system and individual errors • Outline the principles of an effective apology • Knows and understand the professional, legal and ethical codes of own I Medical Council and any other codes to which the physician is bound • Understands of the principles of medical ethics • Understands the principles of confidentiality • Understands the principles of Information Governance • Understands the legal framework for patient consent in relation to medical practise • Recognises the factors influencing ethical decision making including religion, personal and moral beliefs, cultural practices • Understands the local standards of practice employed when deciding to withhold or withdraw life-prolonging treatment • Understands the local legal framework and guidelines for taking and using informed consent for invasive procedures including issues of patient incapacity 	Area 1.4
Skills	<ul style="list-style-type: none"> • To recognise, analyse and know how to deal with unprofessional behaviours in clinical practice taking into account local and national regulations • To create open and nondiscriminatory professional working relationships with colleagues awareness of the need to prevent bullying and harassment • Contribute to processes whereby complaints are reviewed and learned from • Explains comprehensibly to the patient the events leading up to a medical error or serious untoward incident, and sources of support for patients and their relatives • Deliver an appropriate apology and explanation relating to error • Use and share information with the highest regard for confidentiality both within the team and in relation to patients • Counsel patients, family, carers and advocates tactfully and effectively when making decisions about resuscitation status, and withholding or withdrawing treatment • Present all information to patients (and carers) in a format they understand, checking understanding and 	<p>Area 1.4</p> <p>Area 1.4</p>

	allowing time for reflection on the decision to give consent <ul style="list-style-type: none"> • Provide a balanced view of all care options • Applies the relevant legislation that relates to the health care system in order to guide one's clinical practice including reporting to the Coroner's/Procurator Officer (or local equivalent), the Police or the proper officer of the local authority in relevant circumstances • Ability to prepare appropriate medical legal statements for submission to any relevant legal proceedings • Be prepared to present such material in Court 	
Behaviour	<ul style="list-style-type: none"> • To demonstrate acceptance of professional regulation • To promote professional attitudes and values • To demonstrate probity and the willingness to be truthful and to admit errors • Adopt behaviour likely to prevent causes for complaints • Deals appropriately with concerned or dissatisfied patients or relatives • Recognise the impact of complaints and medical error on staff, patients, and the local Health Service • Contribute to a fair and transparent culture around complaints and errors • Recognise the rights of patients to make a complaint • Identify sources of help and support for patients and yourself when a complaint is made about yourself or a colleague • Show willingness to seek advice of peers, legal bodies, and the local medical council in the event of ethical dilemmas over disclosure and confidentiality • Share patient information as appropriate, and taking into account the wishes of the patient • Show willingness to seek the opinion of others when making decisions about resuscitation status, and withholding or withdrawing treatment • Seeks and uses consent from patients for procedures that they are competent to perform while <ul style="list-style-type: none"> ○ Respecting the patient's autonomy ○ Respecting personal, moral or religious beliefs ○ Not exceeding the scope of authority given by the patient ○ Not withholding relevant information • Seeks a second opinion, senior opinion, and legal advice in difficult situations of consent or capacity • Show willingness to seek advice from the employer, appropriate legal bodies (including defence societies), and the local medical council on medico-legal matters 	Area 1.4 Area 1.4 Area 1.4
Examples and descriptors for candidates	<ul style="list-style-type: none"> • Recognises and responds to both system failure and individual error • Provides timely accurate written responses to complaints when required • Counsels patients on the need for information distribution within members of the immediate healthcare team • Seek patients' consent for disclosure of identifiable information • Discuss with patients with whom they would like information about their health to be shared • Understand the importance the possible need for ethical approval when patient information is to be used for 	

	<p>any purpose</p> <ul style="list-style-type: none"> • Understand the difference between confidentiality and anonymity • Know the process for gaining ethical approval for research • Able to assume a full role in making and implementing decisions about resuscitation status and withholding or withdrawing treatment • Able to support decision making on behalf of those who are not competent to make decisions about their own care • Obtains consent for interventions that he/she is competent to undertake, even when there are communication difficulties • Identifies cases which should be reported to external bodies • Identify situations where medical legal issues may be relevant • Work with external bodies around cases that should be reported to them. • Collaborating with external bodies by preparing and presenting reports as required 	
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