

Assessment Blueprint for Gastroenterology

Curriculum area	Competence	Spec. Exam	Mini-CEX	DOPS	MSF	Formal Course	MRCP P2 Written	PACES	CBD
Section 1: UPPER GI TRACT									
<u>i) Dysphagia and non cardiac chest pain</u>									
K - Dysphagia	To define the physiology of swallowing; benign and malignant causes and presentation of dysphagia and its management	•					•		
K - non cardiac chest pain	To define the physiology of oesophagus and gastro-oesophageal junction; gastro-oesophageal reflux disease including symptoms (e.g. heartburn) and endoscopic findings; Barrett's oesophagus	•					•		
S - Dysphagia	To be able to elicit history, investigate appropriately and define medical endoscopic, radiological and surgical treatment strategies	•	•					•	•
S- non cardiac chest pain	To be able to recognise symptom complex, arrange appropriate investigations including pH monitoring, motility studies and endoscopy and interpret findings	•	•					•	•
A - Dysphagia	Demonstrates willingness to participate in diagnosis and treatment of dysphagia				•				
A - non cardiac chest pain	Demonstrates willingness to participate in diagnosis and treatment of non cardiac chest pain				•				

Assessment Blueprint for Gastroenterology

ii) Upper abdominal pain/dyspepsia									
1. Peptic ulcer type dyspepsia 2. Gall bladder type dyspepsia 3. Non ulcer dyspepsia 4. Pancreatic disease		Spec. Exam	Mini-CEX	DOPS	MSF	Formal courses	MRCP P2 Written	PACES	CBD
K - Peptic ulcer type dyspepsia	Define the physiology of gastric acid secretion; Role of helicobacter pylori and its detection and treatment Effect of non steroidal anti-inflammatory drugs and drugs to inhibit gastric acid production and stimulate mucosal protection	●					●		
K - Gall bladder type dyspepsia	Define the physiology of bile, gallstone formation, biliary colic and gall bladder neoplasia	●					●		
K - Non ulcer dyspepsia	Define the physiology of motor disorders of upper GI tract	●					●		
K - Pancreatic disease	See section 2, i), 1; 3, i), 1&2 and 4, ii), 2.	●							
S - Peptic ulcer type dyspepsia	To be able to identify appropriate investigations, make differential diagnosis, identify success of treatment and recognise complications such as gastric outlet obstruction, perforation and bleeding		●					●	●
S- Gall bladder type dyspepsia	To be able to recognise gall bladder symptoms and signs investigate appropriately and instigate medical or surgical treatment		●					●	●
S - Non ulcer dyspepsia	To be able to diagnose and treat dysmotility type symptoms		●					●	●
A - Peptic ulcer type dyspepsia/ Gall bladder type dyspepsia/Non ulcer dyspepsia /Pancreatic disease	Exhibits willingness to manage dyspeptic patients appropriately				●			●	

Assessment Blueprint for Gastroenterology

iii) Nausea and vomiting									
1. Dyspepsia 2. Functional disorders of upper GI tract see 3, ii below 3. Gastric cancer 4. Other causes of nausea and vomiting		Spec. Exam	Mini-CEX	DOPS	MSF	Formal Courses	MRCP P2 Written	PACES	CBD
K - Dyspepsia	See ii) 1 above								
K - Functional disorders of upper GI tract see 3, ii below	Define the non organic causes of upper GI symptoms and their treatment	●							
K - Gastric cancer	Describe the pathogenesis, clinical features, complications, medical and surgical options for treatment	●	●				●	●	
K - Other causes of nausea and vomiting	Recall the metabolic and neurological causes of nausea and vomiting as a manifestation of systemic disease	●					●		
S - Dyspepsia	See ii) 1 above								
S - Functional disorders of upper GI tract see 3, ii below	To be able to diagnose functional disorders and initiate symptomatic treatment								
S - Gastric cancer	To be able to investigate and stage upper GI cancer and make appropriate decisions concerning treatment modalities		●					●	●
S - Other causes of nausea and vomiting	To be able to apply the wide differential diagnosis applicable to these symptoms		●					●	●
A - Dyspepsia/Functional disorders of upper GI tract/Gastric cancer/Other causes of nausea and vomiting	Demonstrates willingness to manage upper gastrointestinal symptoms appropriately		●		●			●	

Assessment Blueprint for Gastroenterology

iv) Upper gastrointestinal bleeding									
1. Assessment of patient with GI bleeding 2. Peptic ulcer bleeding 3. Variceal bleeding 4. Bleeding from vascular anomalies and tumours		Spec. Exam	Mini-CEX	DOPS	MSF	Formal Courses	MRCP P2 Written	PACES	CBD
K - Assessment of patient with GI bleeding	Describe the risk factors for death, pathophysiology of shock and its measurement, resuscitations	●					●		●
K - Peptic ulcer bleeding	Define the pathophysiology of arterial bleeding endoscopic and radiological diagnosis, endoscopic and surgical treatments	●					●	●	●
K - Variceal bleeding	Describe the anatomy and physiology of varices, risk factors for bleeding including size, portal pressure and endoscopic stigmata, coagulation abnormalities	●					●	●	●
K - Bleeding from vascular anomalies and tumours	To describe the clinical features of vascular anomalies and tumours and risks of bleeding	●	●				●	●	●
S - Assessment of patient with GI bleeding	Can evaluate and manage shocked patients adequately		●					●	●
S Peptic ulcer bleeding	Able to evaluate the indications for urgent endoscopy for diagnosis and treatment of bleeding peptic ulcer		●					●	●
S - Variceal bleeding	To be able to recommend appropriate use of endoscopic sclerotherapy and band ligation and administer prophylactic treatments and vasoconstrictor agents as necessary		●					●	●
S - Bleeding from vascular anomalies and tumours	To be able to perform endoscopic diagnosis and recommend treatment with thermal or other methods as appropriate		●	●					
A - Assessment of patient with GI bleeding	Demonstrates willingness to recognise severity of condition and take prompt action as necessary				●			●	●
A - peptic ulcer bleeding	Demonstrates willingness to recommend prompt endoscopic action and liaise with surgical colleagues as necessary				●			●	●

Assessment Blueprint for Gastroenterology

A - Variceal bleeding	Demonstrates willingness to participate in management of variceal haemorrhage and liaise with a specialist liver unit for TIPS or other measures when necessary				•			•	•
A - Bleeding from vascular anomalies and tumours	Demonstrates willingness to participate in endoscopic management				•				

Assessment Blueprint for Gastroenterology

v) Clinical/laboratory tests of GI structure and function									
1. Oesophageal, gastric and ano-rectal function tests 2. Gastric secretion tests 3. Tests for malabsorption 4. Tests for inflammation 5. Radiological evaluation 6 Histopathology evaluation		Spec. Exam	Mini-CEX	DOPS	MSF	Formal Courses	MRCP P2 Written	PACES	CBD
K - Oesophageal, gastric and ano-rectal function tests	Can describe oesophageal pH monitoring, oesophageal and ano-rectal motility/manometry, gastric emptying studies	●	●				●		●
K - Gastric secretion tests	Can explain the relevance of 24h intragastric H ⁺ concentration, maximal acid output, effect of pentagastrin and gastrin releasing peptide	●					●		
K - Tests for malabsorption	Can describe the SeHCAT, PABA, lactose breath H ₂ , lactulose breath H ₂ , faecal elastase	●					●		●
K - Tests for inflammation	Can describe serological and nuclear medicine testing including Tc WBC scans	●	●				●		
K - Radiological evaluation	Can interpret Plain x-rays of abdomen, barium studies of GI tract CT, MRI and ultrasound	●	●					●	●
K - Histopathology evaluation	Has a knowledge of the histological features of common gastrointestinal and liver diseases	●					●	? ●	? ●
S - Oesophageal, gastric and ano-rectal function tests	Demonstrates the ability to recommend use in suitable patients	●	●					●	●
S - Gastric secretion tests	Can recognise value for drug testing and research and can evaluate results	●					●		
S - Tests for malabsorption	To be able to recommend use of the appropriate test and to evaluate results	●	●				●	●	●
S- Tests for inflammation	To be able to make appropriate use and interpret the results								
S - Radiological evaluation	To be able to recommend appropriate use and interpret the results		●					●	●

Assessment Blueprint for Gastroenterology

S - Histopathology evaluation	Can appreciate the histological findings in discussion with histopathologists e.g. at MDT's		●					●	●
A - Gastric secretion tests	Demonstrates willingness to use tests when necessary and appropriate						●		
A- Histopathology evaluation	Demonstrates a willingness to discuss histology findings with histopathologists and use that expert advise		●						●

Assessment Blueprint for Gastroenterology

Section 2: ABSORPTION AND NUTRITION		Spec. Exam	Mini-CEX	DOPS	MSF	Formal courses	MRCP P2 Written	PACES	CBD
i) Malabsorption, anorexia and weight loss									
1. Steatorrhoea Malabsorption									
2. Anorexia and weight loss									
K - Steatorrhoea Malabsorption	Can define the physiology of absorption and pathophysiology of malabsorption. Can describe Coeliac disease, bacterial overgrowth syndrome, small intestinal Crohn's disease, small bowel diverticular disease, chronic pancreatitis and neoplasia	•					•	•	•
K- Anorexia and weight loss	Can explain the differential diagnosis including GI and non GI causes and eating disorders Can describe the recognize the risks of the refeeding syndrome	•	•				•	•	•
S - Steatorrhoea Malabsorption	To be able to recognise symptom patterns and investigate with barium, scanning endoscopic and biochemical tests and give appropriate treatment	•	•				•	•	•
S - Anorexia and weight loss	Interprets the signs and symptoms so as to make an appropriate diagnosis of a GI cause or eating disorders. Arranges investigation. Evaluates results. Is able differentiate organic from non organic disease and arrange treatment Appropriately monitors and treats the entrally fed patient to avoid the risk of the refeeding syndrome	•	•		•		•	•	•
A - Steatorrhoea Malabsorption	Demonstrates willingness to recognise and treat small intestinal and pancreatic disorders and understands patient needs		•		•				•
A - Anorexia and weight loss	Exhibits the ability and willingness to explain and discuss potential causes with patient especially those with non-organic syndromes		•		•				•

Assessment Blueprint for Gastroenterology

ii) Evaluation of anaemia		Spec. Exam	Mini-CEX	DOPS	MSF	Formal courses	MRCP P2 Written	PACES	CBD
1. Anaemia									
2. Iron deficiency anaemia									
3. Macrocytic anaemia									
K - Anaemia	Defines all types including bone marrow disorders and haemolysis	•					•		
K - Iron deficiency anaemia	Describes Iron metabolism, absorption and bioavailability, iron stores, red cell indices, iron absorption, physiological and GI causes of iron losses	•					•		
K - Macrocytic anaemia	Describes B12 and folate metabolism and absorption or malabsorption, pernicious anaemia, ileal disorders, alcoholism	•					•		
S - Anaemia	To be able to recognise anaemia and differentiate possible causes arrange appropriate investigations and then arrange treatment	•	•				•	•	•
S - Iron deficiency anaemia	To be able to recognise iron deficiency, identify cause with appropriate GI investigations, and give necessary treatment	•	•				•	•	•
S - Macrocytic anaemia	Can evaluate the cause of anaemia, confirm by investigation and take necessary action	•	•					•	•
A - Anaemia/Iron deficiency anaemia/Macrocytic anaemia	Demonstrates willingness to investigate appropriately and treat anaemia and where appropriate underlying in GI disease		•					•	•

Assessment Blueprint for Gastroenterology

iii) Short bowel syndrome/high ileostomy output		Spec. Exam	Mini CEX	DOPS	MSF	Formal Courses	MRCP P2 Written	PACES	CBD
1. Short bowel syndrome/ ileostomy diarrhoea									
K - Short bowel syndrome/ ileostomy diarrhoea	Explains fluid and electrolyte balance and its maintenance. Identifies malnutrition and micronutrient deficiency, and the underlying disease processes, Outlines the role of the stomatherapist	•	•				•	•	•
S - Short bowel syndrome/ ileostomy diarrhoea	Demonstrates the ability to detect fluid and electrolyte deficiency and malnutrition and plan treatment		•						•
A - Short bowel syndrome/ ileostomy diarrhoea	Exhibits willingness to manage and refer patients appropriately		•		•				•

Assessment Blueprint for Gastroenterology

iv) Nutritional Support		Spec. Exam	Mini-CEX	DOPS	MSF	Formal Courses	MRCP P2 Written	PACES	CBD
To provide knowledge, skills and attitudes for nutritional support									
1. Nutritional assessment 2. Methods of providing nutritional support 3. PEG (Per Endoscopic Gastrostomy) tube use 4. Obesity									
K - Nutritional assessment	Describe the body composition, energy homeostasis, consequences of under nutrition, and screening	●					●		●
K - Methods of providing nutritional support	Be aware that feeding lines should only be inserted by experts probably by anaesthetists or radiologists depending upon local habit and under sterile conditions. Can describe the refeeding syndrome and attendant risks	●						●	●
K - PEG (Per Endoscopic Gastrostomy) tube use	Identifies the ethics and indications; Describes the anatomy of relevant area, Identifies the types of PEG tubes, and understands the advantages, disadvantages and complications	●	●						●
K - Obesity	Describes the risks of obesity and describe the definitions and evaluate measurement tools	●	●						●
S - Nutritional assessment	To be able to detect under nutrition and apply knowledge to individual patients		●					●	●

Assessment Blueprint for Gastroenterology

S - Methods of providing nutritional support	Evaluates the types of food available and routes of administration, use of intravenous nutrition and its complications. Explains the appropriate use of various forms of enteral feeding; nasogastric and jejunal administration, PEG and J-PEG administration. To be able to choose appropriate route for nutritional support, Supervise the use and management of feeding lines and prescribe appropriate intravenous and enteral feeding regimes. Monitors the entrally fed patient appropriately to avoid the refeeding syndrome		•					•	•
S - PEG (Per Endoscopic Gastrostomy) tube use	To be able to evaluate the need for PEG feeding, insert an appropriate tube and supervise follow up care		•	•					•
S - Obesity	Evaluates obesity and is aware of the dietary, pharmacological and surgical methods of treatment and refers to an obesity service when appropriate		•		•		•		•
A - Nutritional assessment	Demonstrates willingness to assess nutritional needs and involve nutritional support team				•				•
A - Methods of providing nutritional support	Exhibits willingness to assess the different options for nutritional support and to discuss with and explain them to the patient		•		•			•	•
A - PEG (Per Endoscopic Gastrostomy) tube use	Demonstrates willingness to consider PEG support in appropriate cases listen to relatives' fears and expectations and discusses these sympathetically		•		•				•
A - Obesity	Recognizes obesity as an illness and will evaluate and treat the patient in a sympathetically		•		•				

Assessment Blueprint for Gastroenterology

Section 3: ABDOMINAL PAIN AND SYMPTOMS OF COLONIC DISEASE		Spec. Exam	Mini-CEX	DOPS	MSF	Formal Courses	MRCP P2 Written	PACES	CBD
i) Abdominal pain									
1. Acute abdominal pain									
2. Chronic abdominal pain									
3. Treatment of abdominal pain									
K - Acute abdominal pain	Describes the pathophysiological mechanisms, organ specific causes such as hollow viscus obstruction, pancreatitis and non GI causes	•					•		
K - Chronic abdominal pain	Recalls the pathophysiology of Crohn's disease, diverticulitis, intra abdominal neoplasia and pancreatitis	•					•		
K - Treatment of abdominal pain	Describes analgesics, their administration and safety. Can describe medical and surgical nerve blocks	•	•					•	•
S - Acute abdominal pain	Elicits abdominal signs including acute abdomen. Interprets investigations and recommends medical or surgical treatment		•						•
S - Chronic abdominal pain	Arranges appropriate investigations for abdominal pain, and can construct a differential diagnosis		•					•	•
S - Treatment of abdominal pain	Demonstrates the ability to treat abdominal pain appropriately for individual patients with different disease processes		•					•	•
A - Acute abdominal pain	Demonstrates willingness and sympathy to physical and mental responses to pain and its cause		•		•				
A - Chronic abdominal pain	Demonstrates willingness to appreciate and sympathise with the physical and mental responses to pain and its cause		•		•			•	
A - Treatment of abdominal pain	Demonstrates willingness to treat medically and to refer to surgeons, psychiatrists, pain clinics and palliative care teams as appropriate and when necessary		•		•			•	•

Assessment Blueprint for Gastroenterology

ii) Functional bowel disorders		Spec. Exam	Mini-CEX	DOPS	MSF	Formal courses	MRCP P2 Written	PACES	CBD
<ol style="list-style-type: none"> 1. The spectrum of functional bowel disorders including burden of disease, sub types and ethological factors. 2. Oesophageal Dysmotility 3. Functional dyspepsia - Epigastric pain syndrome, postprandial distress syndrome cyclical vomiting in adults and idiopathic nausea 4. Irritable bowel syndrome and its subtypes 5. Constipation 6. Obstructive defecation, proctalgia fugax 7. Change in bowel habit 									
K - The spectrum of functional bowel disorders including burden of disease, sub types and ethological factors.	Can define the physiology of normal and abnormal motility. Understands the importance of central component of functional symptoms. Brain gut interaction, role of somatisation, anxiety and depression and relationship to fibromyalgia and chronic pain syndrome.	●					●		
K - Oesophageal Dysmotility	Can describe the physiology of motor disorders of the upper GI tract including achalasia, diffuse oesophageal spasm and non specific oesophageal dysmotility of the elderly	●					●		
K - Functional dyspepsia - Epigastric pain syndrome, postprandial distress syndrome cyclical vomiting in adults and idiopathic nausea	Can identify disorders of gastric accommodation, gastric hypersensitivity and delayed gastric emptying Understand working of gastric barostat	●	●				●		●
K - Irritable bowel syndrome and its subtypes	Can define the physiology of normal and abnormal intestinal motility. Understands Rome III criteria and sub typing of IBS. Understands importance of central component of IBS symptoms. Brain- gut interactions. Role of anxiety, somatisation, depression. Relationship to fibromyalgia	●					●		●

Assessment Blueprint for Gastroenterology

K - Constipation	Outlines the role of dietary fibre in influencing colonic function & motility, obstructed defecation Hirschsprung's disease. Identifies when to use anti-diarrhoeal agents	●	●				●		●
K - Obstructive defecation, proctalgia fugax	Understand mechanisms of the physiology of defecation	●					●		
K - Change in bowel habit	Define the functional disorders of colon, spurious diarrhoea, autonomic disorders, laxative abuse, diverticulosis and malignancy	●					●		●
S -The spectrum of functional bowel disorders including burden of disease, sub types and ethological factors.	Ability to recognise these conditions and make appropriate differential diagnosis		●					●	●
S - Oesophageal Dysmotility	Able to understand how oesophageal manometry is performed and interpret traces		●				●	●	●
S - Functional dyspepsia - Epigastric pain syndrome, postprandial distress syndrome cyclical vomiting in adults and idiopathic nausea	Can recognise the correlation between abnormal physiology and symptom. Ability to identify abnormalities of the migrating motor complex and response of the intestine for food.		●				●	●	●
S - Irritable bowel syndrome and its subtypes	Assessment of bowel function using Bristol Stool Form Score. Simple assessment of anxiety, depression, and somatisation. Use of HAD and PHQ15 scales and the normal ranges.		●					●	●
S - Constipation	Demonstrates the ability to investigate when necessary and advise on use of diet, laxatives and biofeedback as necessary. Demonstrates the ability to investigate with blood tests stool examination, endoscopy and radiology as appropriate		●					●	●
S - Obstructive defecation, proctalgia fugax	Ability to interpret defecating proctograms and anorectal manometry		●					●	●

Assessment Blueprint for Gastroenterology

S - Change in bowel habit	Evaluates the severity of disease, take necessary action medical or surgical and when appropriate liaises with surgical colleagues. Analyses data to make an accurate diagnosis and give appropriate specific or symptomatic treatment including use of antispasmodics, dietary fibre and constipating agent		•					•	•
A -The spectrum of functional bowel disorders including burden of disease, sub types and ethological factors.	Willingness to accept disability associated with functional bowel disorders and the need to adequate explanation and support		•		•			•	•
A - Oesophageal Dysmotility	Exhibits sympathy and empathy with patients with motility disorders		•		•			•	
A - Functional dyspepsia - Epigastric pain syndrome, postprandial distress syndrome cyclical vomiting in adults and idiopathic nausea	Recognises the importance of psychological factors, provide empathic support in small bowel motility problems including pseudo obstruction		•		•				•
A - Irritable bowel syndrome and its subtypes	Willingness to accept patient with functional bowel disorders as worthy of explanation and support. Recognises impairment of quality of life associated with IBS. Able to assess central components in IBS patients		•		•			•	•
A - Constipation	Demonstrates willingness to investigate and counsel and sympathise as appropriate		•		•			•	
A - Obstructive defecation, proctalgia fugax	Able to explain the disorder and provide practical advice		•		•			•	

Assessment Blueprint for Gastroenterology

<p>A - Change in bowel habit</p>	<p>Demonstrates willingness to appreciate patient discomfort associated with diarrhoea and incontinence and take sympathetic action. Exhibits sympathy towards the patient with diarrhoea. Exhibits willingness to consult with surgical colleagues when necessary. Demonstrates sympathy with the patient and willingness to treat as appropriate</p>		•		•			•	
----------------------------------	--	--	---	--	---	--	--	---	--

Assessment Blueprint for Gastroenterology

iii) Diarrhoea , Inflammatory bowel disease		Spec. Exam	Mini-CEX	DOPS	MSF	Formal courses	MRCP P2 Written	PACES	CBD
1. Diarrhoea infections									
2. Treatment of diarrhoea									
3. Inflammatory bowel disease									
K - Diarrhoea infections	Identifies infective diarrhoea(viral, bacterial and protozoal) from secretory and osmotic diarrhoea as seen in inflammatory bowel disease, intestinal ischaemia, neoplastic and infiltrative disorders	•	•				•	•	•
K - Treatment of diarrhoea	Defines the medical and surgical options for treatment of ulcerative and Crohn's colitis, the use of antimicrobials in both infective and non-infective diarrhoea and when to refer to surgical colleagues. Identifies when to use anti-diarrhoeal agents	•	•				•	•	•
K - Inflammatory bowel disease	Describes the diagnostic parameters differential diagnosis and different forms of investigation e.g. radiology or endoscopy. Can assess disease severity and when to involve surgical opinion	•	•				•	•	•
S - Diarrhoea infections	Demonstrates the ability to investigate with blood tests stool examination, endoscopy and radiology as appropriate		•				•	•	•
S - Treatment of diarrhoea	Evaluates the severity of disease, take necessary action medical or surgical and when appropriate liaises with surgical colleagues		•				•	•	•
S - Inflammatory bowel disease	Selects appropriate treatment for the disease extent and severity including surgical opinion. Is aware of the role of immunomodulators in these diseases		•				•	•	•
A - Diarrhoea infections	Demonstrates willingness to appreciate patient discomfort associated with diarrhoea and incontinence and take sympathetic action		•		•			•	

Assessment Blueprint for Gastroenterology

A - Treatment of diarrhoea	Exhibits sympathy towards the patient with diarrhoea. Exhibits willingness to consult with surgical colleagues when necessary		•		•			•	•
A - Inflammatory bowel disease	Recognises the urgency of the acutely ill patient. Is sympathetic to the patient and family concerns. Calls for surgical support when needed		•		•			•	•

Assessment Blueprint for Gastroenterology

iv) Rectal bleeding and perianal fistulae		Spec. Exam	Mini-CEX	DOPS	MSF	Formal Courses	MRCP P2 Written	PACES	CBD
1. Rectal bleeding 2. Perianal fistulae									
K - Rectal bleeding	Recalls the causes; haemorrhoids neoplasia of anus and colon; colitis and Crohn's disease and in some instances diverticular disease	•	•				•	•	•
K - Perianal fistulae	Describes Benign fistulae, fistulae complicated by perianal sepsis and complicating inflammatory bowel disease	•	•				•	•	•
S - Rectal bleeding	Interpret the history, examine patients and uses the relevant techniques i.e. endoscopy (rigidsig, flexisig, colonoscopy), Barium enema. Interprets the results and undertakes appropriate action		•				•	•	•
S - Perianal fistulae	Performs relevant investigations including MRI. Able to give medical treatment, understands the role of surgery and liaises with surgical colleagues when necessary		•				•	•	•
A - Rectal bleeding	Demonstrates willingness to undertake appropriate investigations and start treatment		•		•			•	
A - Perianal fistulae	Treats the patient sympathetically. Recognises the social distress caused by these lesions		•		•			•	

Assessment Blueprint for Gastroenterology

Section 4: LIVER		Spec. Exam	Mini-CEX	DOPS	MSF	Formal Courses	MRCP P2 Written	PACES	CBD
i) Abnormal liver function tests									
1. Pathophysiology of liver dysfunction 2. Hepatic dysfunction 3. Investigation of hepatic dysfunction 4. Liver biopsy <i>Mandatory for those doing liver subspecialty training optional for other trainee</i>									
K - Pathophysiology of liver dysfunction	Discusses the Bilirubin metabolism, hepatic and biliary inflammatory processes, hepatic malignancy, hepatic blood flow	•					•	•	•
K - Hepatic dysfunction	Understands the biochemical, haematological, viral, autoimmune and metabolic markers of liver disease	•					•	•	•
K - Investigation of hepatic dysfunction	Discusses the indications for liver biopsy, abdominal ultrasound, CT, ERCP, MRI/MRCP	•	•				•	•	•
K - Liver biopsy <i>Mandatory for those doing liver subspecialty training optional for other trainee</i>	Describe the technique, types of needle, indications, pre and post procedure care, and complications. Identifies the types of procedure i.e. blind, ultrasound guided, trans-jugular	•					•		•
S - Pathophysiology of liver dysfunction	To be able to recognise range of disease processes possible	•					•		•
S - Hepatic dysfunction	Evaluates investigations including haematology, biochemistry, microbiology, radiology and ultrasound	•	•				•	•	•
S - Investigation of hepatic dysfunction	Selects and interpret appropriate tests as required. Where necessary i.e. liver biopsy obtains informed consent		•				•	•	•
S - Liver biopsy <i>Mandatory for those doing liver subspecialty training optional for other trainee</i>	Obtains informed consent. Performs blind liver biopsy or recommends ultrasound guided or transjugular approach as necessary. Recognises the place of each technique and understands and recognizes the complications		•	•					•

Assessment Blueprint for Gastroenterology

A - Pathophysiology of liver dysfunction	Demonstrates willingness to use appropriate tests in correct circumstances							•	
A - Hepatic dysfunction	Recognises the disease process. Keeps the patient informed of the progress of investigation				•				
A - Investigation of hepatic dysfunction	Chooses the correct investigation and explains technique where necessary and results to the patient		•		•			•	
A - Liver biopsy <i>Mandatory for those doing liver subspecialty training optional for other trainee</i>	Chooses this technique when necessary and explains the reasons for using an invasive technique. Answers concerns and obtains informed consent		•		•				

Assessment Blueprint for Gastroenterology

i) Jaundice		Spec. Exam	Mini-CEX	DOPS	MSF	Formal courses	MRCP P2 Written	PACES	CBD
1. Anatomy and physiology of biliary system 2. Jaundice: Differential diagnosis and investigation 3. Jaundice: Treatment									
K - Anatomy and physiology of biliary system esp. for those doing advanced endoscopy	Able to describe the normal and common variant anatomy of the pancreas & biliary tree. Identify the cause of extra and intrahepatic biliary obstruction and its clinical manifestations. Describe the physiology of bile production	●					●		●
K - Jaundice: Differential diagnosis and investigation	Define differential diagnosis of jaundice including hepatitis, alcoholic liver disease, biliary obstruction due to pancreatic malignancy, chronic pancreatitis or gall stones. Chronic liver disease (e.g. Autoimmune hepatitis PBC, PSC) and hepatic malignancy	●	●				●	●	●
K - Jaundice: Treatment	Able to outline the surgical, radiological and medical treatment options of jaundiced patients	●	●				●	●	●
S - Anatomy and physiology of biliary system	Recognise biliary obstruction and its complications Perform and interpret the relevant investigations		●				●	●	●
S - Jaundice: Differential diagnosis and investigation	Selects and interprets investigations of jaundiced patients including ultrasound, CT, MRI, ERCP and liver biopsy. Initiates appropriate treatment		●					●	●
S - Jaundice: Treatment	To be able to select most appropriate treatment for individual patients		●				●		●
A - Anatomy and physiology of biliary system/Jaundice: Differential diagnosis and investigation /Jaundice: Treatment	Recognises the development of the various causes of jaundice and takes appropriate action. Keeps the patient informed				●				

Assessment Blueprint for Gastroenterology

iii) Hepatosplenomegaly and abdominal swelling		Spec. Exam	Mini-CEX	DOPS	MSF	Formal courses	MRCP P2 Written	PACES	CBD
1. Hepatosplenomegaly 2. Abdominal swelling 3. Abdominal masses including cysts									
K - Hepatosplenomegaly	Outline the causes of cirrhosis, primary and secondary hepatic malignancy and infiltrative and metabolic disorders of the liver	•	•				•		•
K - Abdominal swelling	Can recall the pathophysiology of portal hypertension and causes of ascites including non-GI causes	•	•				•		•
K - Abdominal masses including cysts	Define the causes of hepatic and extrahepatic masses	•					•		•
S - Hepatosplenomegaly	Discusses the differential diagnosis of cirrhosis, hepatic malignancy, haemochromatosis, alpha 1 antitrypsin deficiency and Wilson's disease. Selects appropriate therapeutic options available		•				•	•	•
S - Abdominal swelling	Discusses a differential diagnosis including GI and no-GI causes. Safely and appropriately manages ascites. Performs paracentesis when needed with or without albumen support as indicated other wise uses diuretics and fluid restriction. Manages spontaneous bacterial peritonitis with diuretics, antibiotics and paracentesis as necessary. Refers for TIPS when indicated		•	•			•	•	•
S - Abdominal masses including cysts	Recognises abdominal masses and initiate appropriate investigations e.g. scans Ultrasound, CT or MRI biochemical tests and biopsy if needed		•					•	•
A - Hepatosplenomegaly	Demonstrates willingness to investigate and treat liver disease, ascites and abdominal masses				•				

Assessment Blueprint for Gastroenterology

A- Abdominal swelling	Demonstrates willingness to consult with and refer to a specialist unit as appropriate								•
A - Abdominal masses including cysts	Sympathetic to patient's concerns. Investigate appropriately and with minimal risk to the patient. Takes informed consent when necessary		•		•				•

Assessment Blueprint for Gastroenterology

iv) Confusion progressing to liver failure		Spec. Exam	Mini-CEX	DOPS	MSF	Formal Courses	MRCP P2 Written	PACES	CBD
1. Confusion 2. Liver failure									
K - Confusion	Describe the pathophysiology, clinical features stage and precipitants of hepatic encephalopathy in liver disease	•					•		•
K - Liver failure	Recalls the causes and manifestations of acute and chronic hepatic failure	•	•				•		•
S - Confusion	Recognises, investigates and treats hepatic encephalopathy, alcohol withdrawal syndromes and other causes of confusion		•				•	•	•
S - Liver failure	Evaluates the patient's progression to hepatic failure. Demonstrates the knowledge to commence treatment and to refer to a specialist liver unit for consideration for liver transplantation in a timely manner		•		•				•
A - Confusion	Demonstrates willingness treat hepatic encephalopathy. Shows compassion towards relatives				•				•
A - Liver failure	Exhibits a willingness to consult with and refer to specialist liver unit as appropriate				•				•

Assessment Blueprint for Gastroenterology

SECTION: 5 ADVANCE LIVER SUBSPECIALTY TRAINING OPTION AVAILABLE MAINLY IN SPECIALITY LIVER UNITS		Spec. Exam	Mini- CEX	DOPS	MSF	Formal courses	MRCP P2 Written	PACES	CBD
Subspecialty training in Hepatology									
1. Acute Hepatitis 2. Anti viral therapy 3. Acute hepatic failure 4. Non-viral chronic liver disease 5. Severe complications of chronic liver disease 6. Benign and malignant tumours of the hepatobiliary system 7. Liver transplantation									
K - Acute Hepatitis	Describe the various types of acute hepatitis e.g. viral, alcoholic, drug induced, toxic	•					•		•
K - Anti viral therapy	Describe the criteria for treatment with and efficacy of anti viral therapy for hepatitis B & C	•	•				•		•
K - Acute hepatic failure	Define the causes and manifestations of acute hepatic failure and its complications including cerebral oedema coagulopathy and the hepatorenal syndrome	•	•				•		•
K - Non-viral chronic liver disease	Identifies the various types of chronic liver disease, e.g. autoimmune, primary biliary cirrhosis Wilson's disease alcoholic Haemochromatosis alpha 1 antitripsin deficiency	•	•				•		•
K - Severe complications of chronic liver disease	Describe the complications of chronic liver disease including portal hypertension and portal-systemic collaterals, infections, and metabolic and circulatory complications	•	•				•		•
K - Benign and malignant tumours of the hepatobiliary system	Describes hepatic adenoma, hepatoma and cholangiocarcinoma and medical, surgical and radiological management	•	•				•		•
K - Liver transplantation	Able to list appropriate patients and timing of transplantation. Defines the management of peri- and post-operative complications including rejection and infection. Explains the role of Immunosuppressive therapy	•	•		•		•		•

Assessment Blueprint for Gastroenterology

S - Acute Hepatitis	Performs tests to make a diagnosis	●	●						●
S - Anti viral therapy	Administer and monitor anti viral therapy for hepatitis B & C with appropriate monitoring investigations as necessary		●						●
S - Acute hepatic failure	Recognises progression of acute hepatic failure and its treatment. Analysis data to determine the need for liver transplantation		●						●
S - Non-viral chronic liver disease	Interprets the investigation results appropriately	●	●						●
S - Severe complications of chronic liver disease	Discusses the use of and follow up of TIPS or surgery in patients with portal hypertension, and the approaches to renal dysfunction		●						●
S - Benign and malignant tumours of the hepatobiliary system	Discusses the use of screening and the different therapeutic strategies available for individual patients		●						●
S - Liver transplantation	Evaluates patients for liver transplantation and interprets criteria for selection. Able to manage complications of transplantation. Able to manage immunosuppressive therapy		●						●
A - Acute Hepatitis	Recognises the different types and communicates information to the patient				●				●
A - Anti viral therapy	Demonstrates willingness to participate in the diagnosis and management of viral disease of the liver. Counsells patients about the treatment and is side effects and efficacy		●		●				●
A - Acute hepatic failure	Exhibits awareness of the opportunities available for treatment. Keeps the patient and relatives informed as to these options and prognosis if possible				●				●
A - Non-viral chronic liver disease	Recognises the requirements for treatment and keeps patient and relatives informed				●				●
A - Severe complications of chronic liver disease	Chooses the correct treatment option								●

Assessment Blueprint for Gastroenterology

A - Benign and malignant tumours of the hepatobiliary system	Recognises the urgency of the treatment required		•		•				•
A - Liver transplantation	Recognises the complexity of the treatment and explains this to patient and family. Explains possible causes for delay		•		•				•

Assessment Blueprint for Gastroenterology

Section 6: ENDOSCOPY		Spec. Exam	Mini-CEX	DOPS	MSF	Formal Courses	MRCP P2 Written	PACES	CBD
i) Endoscopic safety									
1. Equipment									
2. Consent									
3. Sedation and monitoring									
K - Equipment	Describe the structure and function of an endoscope, the light source, processor and accessories including diathermy and thermal methods for coagulation e.g. Heater probe and Argon Plasma Coagulator	●		●		●			
K - Consent	Recalls the medical and legal issues concerning consent and provision of information. Is familiar with the latest guidelines on consent	●	●			●			●
K - Sedation and monitoring	Identifies the sedative and analgesic drugs used and their additive effects. Describes necessary monitoring including oxygen saturation	●	●			●			
S - Equipment	Able to clean and disinfect equipment in accordance with BSG guidelines and use equipment in accordance with manufacturers recommendations			●	●	●			
S - Consent	Demonstrates ability to take informed to consent with a patient in accordance with BSG and National guidelines		●	●		●			
S - Sedation and monitoring	Performs endoscopy with safe and effective sedation. Uses safe monitoring before and after procedure			●	●	●			
A - Equipment	Demonstrates willingness to undertake endoscopy cleaning as necessary and uses the equipment appropriately				●				
A - Consent	Demonstrates willingness to obtain consent for endoscopic procedures in an appropriate manner. Respects the patients dignity and privacy			●	●				
A - Sedation and monitoring	Exhibits willingness to participate in safe endoscopic practice				●				

Assessment Blueprint for Gastroenterology

ii) Upper and lower GI endoscopy		Spec. Exam	Mini-CEX	DOPS	MSF	Formal courses	MRCP P2 Written	PACES	CBD
1. Diagnostic gastroscopy Oesophagogastroduodenoscopy (OGD) 2. Endoscopic therapy of benign and malignant oesophageal strictures 3. Thermal therapy of gastro-oesophageal tumours, ulcers and vascular malformations 4. Direct injection/banding techniques for bleeding lesions and tumour 5. Flexible sigmoidoscopy									
K - Diagnostic gastroscopy Oesophagogastroduodenoscopy (OGD)	Defines the indications, contraindications, preparation and documentation	•		•		•			•
K - Endoscopic therapy of benign and malignant oesophageal strictures	Describes methods for dilation of oesophageal stricture and insertion of prosthetic tube or expandable metal stents when needed.	•		•		•			•
K - Thermal therapy of gastro-oesophageal tumours, ulcers and vascular malformations	Discusses the laser and thermal methods for tumour ablation and control of bleeding lesions	•		•		•			•
K - Direct injection/banding techniques for bleeding lesions and tumour	Describes the indications for endoscopic sclerotherapy or banding of oesophageal varices and injection of vasoconstrictor agents for arterial bleeding lesions	•		•		•			•
K - Flexible sigmoidoscopy	Explains the indications, contraindications, complications and their management. Describes , patient preparation and documentation	•		•		•			•
S - Diagnostic gastroscopy Oesophagogastroduodenoscopy (OGD)	Performs OGD, take biopsies, including D2 (second part of duodenum) biopsies for diagnosis of coeliac disease. Interpret findings and take necessary action to appropriate level. (<i>JAG guidelines Appendix 2</i>)			•		•			

Assessment Blueprint for Gastroenterology

S - Endoscopic therapy of benign and malignant oesophageal strictures	Performs dilatation of oesophageal strictures and insertion of prosthetic devices when appropriate			●		●			
S - Thermal therapy of gastro-oesophageal tumours, ulcers and vascular malformations	Demonstrates ability to use thermal and laser methods during upper GI endoscopy			●		●			
S - Direct injection/banding techniques for bleeding lesions and tumour	Performs injection sclerotherapy, band ligation and adrenaline injection as appropriate into appropriate lesions			●		●			
S - Flexible sigmoidoscopy	Performs flexible sigmoidoscopy and be able reach the descending colon in 90% of cases. (<i>JAG guidelines Appendix 2</i>) Take biopsies and perform polypectomy and take other necessary action as required			●		●			
A - Diagnostic gastroscopy Oesophagogastroduodenoscopy (OGD)	Demonstrates willingness and ability to practise endoscopy in such a way as to minimise risk and discomfort to patients, and obtain help when needed			●	●	●			
A - Endoscopic therapy of benign and malignant oesophageal strictures	Exhibits willingness and ability to practice safe endoscopy with minimum patient discomfort. To obtain help when needed			●	●	●			
A - Thermal therapy of gastro-oesophageal tumours, ulcers and vascular malformations	Demonstrates willingness and ability to practice safe endoscopy and to obtain help when needed			●	●	●			
A - Direct injection/banding techniques for bleeding lesions and tumour	Demonstrates willingness and ability to practice safe endoscopy and to obtain help when needed.			●	●	●			
A - Flexible sigmoidoscopy	Demonstrates willingness to undertake distal colonoscopy in such a way as to minimise risk and discomfort to patient and obtain help when needed			●	●	●			

Assessment Blueprint for Gastroenterology

iii) Colonoscopy and enteroscopy(Not mandatory for CCT)		Spec. Exam	Mini-CEX	DOPS	MSF	Formal Courses	MRCP P2 Written	PACES	CBD
6. Diagnostic total colonoscopy									
7. Colonoscopic therapy of benign and malignant tumours and strictures									
8. Enteroscopy									
K - Diagnostic total colonoscopy	Define the indications, contraindications, complications and their management. Outline patient preparation and documentation	•		•		•			•
K - Colonoscopic therapy of benign and malignant tumours and strictures	Define the place of polypectomy for removal of polyps. Describe the use of laser and thermal methods for tumour ablation. Describe the dilatation of colonic strictures and insertion of prosthetic stents when appropriate.	•		•		•			•
K - Enteroscopy	Describe the indications, contraindications, complications and their management. Outline patient preparation and documentation	•		•		•			•
S - Diagnostic total colonoscopy	Performs the procedure and reach caecum in at least 90% of cases Where indicated take biopsies, undertake polypectomy and take other necessary action as required. Demonstrate ability to intubate the terminal ileum in at least 50% of cases. (JAG Guidelines Appendix 2)			•		•			
S - Colonoscopic therapy of benign and malignant tumours and strictures	Performs polypectomy for benign and malignant polyps as appropriate. Applies laser and thermal methods to control tumour growth and recanalise colon as necessary. Ability to insert colonic stents is an optional skill not required of all trainees			•		•			
S - Enteroscopy	Performs enteroscopy in suitable patients. Able to treat vascular lesions and polyps appropriately (JAG guidelines appendix 2)			•		•			

Assessment Blueprint for Gastroenterology

A - Diagnostic total colonoscopy	Demonstrates willingness to undertake colonoscopy in such a way as to minimise risk and discomfort to patient and obtain help when needed			•	•	•			
A - Colonoscopic therapy of benign and malignant tumours and strictures	Demonstrates willingness to undertake therapy in such a way as to minimise risk and discomfort to patient and to obtain help when needed			•	•	•			
A - Enteroscopy	Demonstrates willingness to carry out safe enteroscopy and to refer patients to a colleague or specialist unit as necessary			•	•	•			

Assessment Blueprint for Gastroenterology

iii) Diagnostic and therapeutic ERCP (<i>Not mandatory for CCT</i>)		Spec. Exam	Mini-CEX	DOPS	MSF	Formal courses	MRCP P2 Written	PACES	CBD
1. ERCP									
2. Therapeutic ERCP									
K - ERCP	Describes the indications, contraindications, complications and their management, Outlines patient preparation and documentation	•		•		•			•
K - Therapeutic ERCP	Describes the indications for Endoscopic sphincterotomy with or without the insertion and replacement of biliary stents, (plastic and metal) defines the place of combined endoscopic and radiological procedures. Identifies possible complications	•		•		•			•
S - ERCP	Performs the procedure and identifies the papilla in 95% of cases cannulation success is commensurate to the level of training. <i>(JAG Guidelines appendix 2)</i>			•		•			
S - Therapeutic ERCP	Selects appropriate cases for sphincterotomy and stent insertion. Success rate should be commensurate with the level of training. It is understood that trainees may not achieve but should aspire to the required international standard before CCT <i>(JAG guidelines Appendix 2)</i>			•		•			
A - ERCP	Demonstrates willingness to undertake ERCP in such a way as to minimise risk and discomfort to patient and obtain help when needed			•	•	•			
A - Therapeutic ERCP	Exhibits willingness to perform therapeutic ERCP in such a way as to minimize risk and discomfort to the patient and to obtain help when needed			•	•	•			