

# **SPECIALTY TRAINING CURRICULUM**

## **FOR**

# **GASTROENTEROLOGY**

**AUGUST 2010**  
**AMENDMENTS AUGUST 2013**

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# 1 Introduction

Specialist training in gastroenterology begins at ST1 level, although training in the first two years is general and need not necessarily include experience of working in a gastroenterology unit. Yet in an important respect, postgraduate training in the specialty begins during the foundation programme where the fundamental skills of history taking and examination are honed. Although diagnosis in gastroenterology often requires a very complex investigational approach, common conditions such as irritable bowel syndrome are diagnosed not by a series of tests but by clinical assessment. Indeed, many of those who choose to become gastroenterologists are very attracted by its combination of the use of fundamental clinical skills with some of the most sophisticated technology of modern medicine.

Gastroenterology is one of the major specialties of internal medicine yet is a much younger discipline than cardiology, neurology and thoracic medicine. The specialty has grown incredibly fast over the past 30 years and even as recently as the 1970s there were many hospitals without consultant gastroenterologists. There are several factors that have led to the substantial growth of gastroenterology as a specialty.

## 1 Endoscopy in Diagnosis and Treatment.

The role of endoscopy in diagnosis has progressively extended into therapy and endoscopic techniques have now largely replaced surgery in the management of gastrointestinal haemorrhage, non-malignant tumours of the colon and some causes of bile duct obstruction. While proficiency in upper GI endoscopy is required of most clinical gastroenterologists, some of the more specialised techniques and in particular Endoscopic Retrograde Cholangio-Pancreatography (ERCP) and endoscopic ultrasound (EUS) require specialised training.

## 2 Technology of Diagnosis

The technological developments in radiology with ultrasound and axial imaging employing both CT and MRI have vastly enhanced the process of diagnosis in clinical gastroenterology and, like endoscopy, these techniques have increasingly become interventional.

## 3 Therapeutics in Gastroenterology.

There have been substantial advances in treatment of many common conditions. Some are readily utilised in primary care while others, such as options for treating patients with inflammatory bowel disease (IBD), require a high level of expertise

## 4 Management of Gastrointestinal Cancer.

Gastrointestinal cancers are common. The most important factor contributing to survival is early diagnosis where the role of medical gastroenterology is crucial. Cancer prevention is of increasing importance.

## 5 Impact of Liver Disease.

There has been a progressive increase in the incidence of alcoholic liver disease but perhaps less well known is the increase in patients with viral hepatitis whose treatment is highly specialised. The range of treatments for patients with chronic liver disease, which includes transplantation, has rapidly expanded. It was in response to the perceived need for specialists in liver disease that the Specialist Training Authority (fore-runner of GMC) approved hepatology as a sub-specialty of gastroenterology in 2004.

Specialists in gastroenterology are trained to deal with highly complex conditions such as uncontrolled gastrointestinal haemorrhage, complicated IBD and acute hepatic failure yet they must also be skilled in treating patients with persisting dyspepsia in whom ulcer disease has been excluded, in managing patients with irritable bowel syndrome who have not responded to treatments in primary care and indeed up to a third of the workload of a gastroenterologist in clinic might be taken up with patients who have functional gut disorders. Successful treatment of such patients requires a portfolio of skills, many of which are not to be found in prescribing manuals.

Most patients who are referred to gastroenterologists from primary care are assessed in the outpatient clinic and appropriate investigation is performed without resort to admission to hospital. Many Trusts will have specialist clinics where the needs of patients with, for example, IBD or coeliac disease can be managed. The role of the nurse specialist in gastroenterology has developed greatly over the past ten years not just to help in the management of patients with IBD and cancer but to support and provide endoscopy services. In addition to liaison with nurse specialists, medical gastroenterologists require close interaction with:

- Surgeons.
- Diagnostic and interventional radiologists.
- Pathologists.
- Oncologists.

A particular example of close multi-disciplinary working is the contemporary management of gastrointestinal cancer where regular multi-disciplinary team meetings function to optimise patient management by directing patients along the most appropriate management pathway. Interactions between gastroenterologists, surgeons, radiologists and pathologists are essential in the management of patients with complicated IBD. Hepatologists develop crucial links with radiological and colleagues and the importance of their close liaison with histopathologists is long established.

Most consultant gastroenterologists in the UK and most specialty registrars training in gastroenterology choose to train both in their specialty with as well as in General Internal Medicine (GIM). Gastroenterology is the most general of the major medical specialities. This curriculum recognises that most trainees will wish to obtain dual accreditation and then practise both as specialist gastroenterologists and as general physicians. Yet gastroenterology as a specialty can stand alone.

While most gastroenterologists provide a broad, comprehensive service, there is a perceived need for some clinicians in the speciality to deliver a high quality service in very specific areas. Some modalities of endoscopy are so highly specialised and require such a high degree of technical proficiency that it is appropriate to focus training opportunities here on a selected number of individual who show a high level of potential during their training. So the present curriculum outlines a programme for advanced training in endoscopy of the bile ducts and pancreas (ERCP) as well as in endoscopic ultrasound (EUS). In a similar vein, although all gastroenterologists should be competent to manage the majority of patients with IBD who come under their care, it is recognised that a proportion of such patients are highly complex and require very specialised management. The gastroenterology community has been working towards developing IBD Service Standards and it is clear that, in specialised centres, highly trained individuals will be required to provide the service. Clinical nutrition has been a neglected area within medicine not least because it has been something of an orphan. However, it has now been very much welcomed into the family of gastroenterology and

clinical nutrition has become an important part of the syllabus. The present curriculum recognises the increasing importance of nutrition in both health and disease but in addition, reacts to the need to ensure that a higher standard of clinical services must be provided for patients who have severe nutritional disorders. This requires an improvement in the standard of training of all gastroenterologists in clinical nutrition and, for the few who wish to specialise, a period advanced training.

In the present curriculum, it is also recognised that the training of all gastroenterologists and hepatologists should be enhanced to enable them to cope with the increasing burden of chronic liver disease in the community. This is reflected in the curriculum where the standards of training in liver disease have been comprehensively developed in close liaison with hepatologists.

Gastroenterology has evolved much faster than any other comparable major specialty. The 2010 curriculum is a very substantial revision of its forebears and should be seen as a living document that will respond rapidly both to developments in the specialty and to the needs of clinical service.

## **2 Rationale**

### **2.1 Purpose of the Curriculum**

The purpose of this curriculum is to define the process of training and the competencies needed for the award of a certificate of completion of training (CCT) in gastroenterology.

The unequivocal aim of the curriculum is to deliver a programme of training which when completed will enable the successful individual to practise independently as a gastroenterologist trained to the level of a consultant physician in the United Kingdom.

For those individuals who express a specialist interest in hepatology and have competed successfully for one of the advanced hepatology training posts, there will be recognition of their enhanced skills which will enable trainees who complete that programme to deliver a specialised clinical service in liver disease.

The training programme is demanding and to complete it satisfactorily requires a portfolio of relevant specialist clinical skills as well as technical proficiency in endoscopy.

It is expected that most trainees following the gastroenterology curriculum to CCT level will be doing so in parallel with the training programme in general internal medicine. Yet it should be emphasised that this curriculum is free-standing and specifies the training that is required and competencies that must be achieved to practice independently as a specialist in gastroenterology. Trainees in gastroenterology will have begun their post-graduate career at Foundation Year level (or equivalent). They will have satisfactorily completed the first and second Foundation Years having acquired a grounding in medical and surgical specialities and many will have had experience of acute gastrointestinal emergencies in the Accident & Emergency Department.

Following satisfactory progression through the Foundation Years, potential trainees in gastroenterology will have entered a programme of specialist training either at Core Medical Training level or on the Acute Medicine Component of Acute Care

Common Stem training scheme. It is appropriate that such trainees are exposed to a range of acute medical specialties and following completion of the two year programme and having acquired Part I of the MRCP exam, they will be in a position to apply for entry into this specialist training programme in gastroenterology at ST3 level. Trainees from the European Union and elsewhere who have completed training programmes in their own countries comparable to those of the Foundation Year and ST1 and ST2 have also completed MRCP Part I will also be eligible for entry at ST3. It should be noted that from 2011 onwards, it has been a mandatory requirement for entry into the gastroenterology training programme at ST3 to have passed the full MRCP examination.

The primary purpose of the curriculum is to provide a programme of training which, when successfully completed, will have armed the trainee with all of the competencies required to practice as an independent specialist gastroenterologist. Although it is likely (and indeed encouraged) that trainees will develop particular clinical interests during their training years, the curriculum is designed to train across the breadth and depth of the entire subject. The curriculum will enable trainees equally to have all the skills to assess and manage patients in clinics as well as inpatients. They will be able to select investigations appropriately and have reached a standard of performance in gastrointestinal endoscopy that will enable them to practise these procedures independently. Trainees will have acquired the skills to pass on their experience to the next generation be they undergraduate or postgraduate medical trainees or those in allied disciplines. They will have acquired a portfolio of generic skills particularly those including leadership and management crucial not only to running a clinical service but also to developing that service. Finally, they will be given such a grounding in the specialty that will serve as a platform for Continued Professional Development in the context of life-long learning.

The curriculum has mapped the four domains of the Good Medical Practice Framework for Appraisal and Assessment to its content which has provided the opportunity to define skills and behaviours which trainees require to communicate effectively with their patients as well as carers and families and clearly states how these should be assessed. The curriculum covers training for all four nations of the UK.

## **2.2 Development**

This curriculum was developed by the Specialty Advisory Committee for Gastroenterology under the direction of the Joint Royal Colleges of Physicians Training Board (JRCPTB). It replaces the previous version of the curriculum dated May 2007, with changes to ensure the curriculum meets GMC's standards for Curricula and Assessment, and to incorporate revisions to the content and delivery of the training programme. Major changes from the previous curriculum include the incorporation of generic, leadership and health inequalities competencies.

The 2007 curriculum is regarded as having been successful within its own terms but the SAC felt that it ought to take the opportunity of the triennial curriculum review to consult widely with the intention of being prepared to undertake major revision where necessary. There is close liaison between the SAC in Gastroenterology (whose membership includes the Heads of Specialist Training) and the British Society of Gastroenterology Training Committee (which largely consists of Programme Directors in each Deanery). The SAC and BSG held a combined Curriculum Conference on 6th March 2009 at the Royal College of Physicians of London at which the members of both committees were invited as well as the President and

Vice President of the BSG and representatives from sub-specialist committees of the BSG. Invitations were also extended to the Chairman of the Joint Advisory Group on Gastrointestinal Endoscopy as well as the British Association for Parenteral and Enteral Nutrition and British Association for the Study of the Liver. Representation from the Education Department of the RCP was also sought. Delegates also included trainee representatives from within the BSG but also the autonomous Trainees in Gastroenterology (TiGs).

The March 2009 meeting laid the framework for the curriculum re-design. The meeting considered the likely roles and responsibility of the consultant gastroenterologist in 2015. It looked at the strengths and weaknesses of the existing curriculum, what might be omitted and what expanded. The importance of gastrointestinal endoscopy was considered but in the context of the likely need for future service provision. The increasing role of the gastroenterologist in clinical nutrition was seen as already apparent and the demand on gastroenterology for cancer services was expected to increase. The year-on-year increase in the number of patients presenting with liver disease was highlighted.

The consensus of the meeting was that the curriculum should continue to look towards training a broadly based gastroenterologist yet recognise the constraints of doing this as the European Working Time Directive reduced the number of hours that trainees were actually available for training. As an example of one of the changes that has been made, skills in flexible sigmoidoscopy will no longer be a mandatory requirement for CCT although proficiency in diagnostic and therapeutic upper GI endoscopy remains.

The Curriculum Conference also addressed sub-specialisation. The trainees' group, TiGs, carried out a very detailed survey of how their members perceived their training during the year 2008. Although there was broad satisfaction, a number of issues emerged and in particular the trainees wanted better training in clinical nutrition and also wished for the opportunity to sub-specialise. Hepatology became a sub-specialty in 2004 but the conference discussed the need for further sub-specialisation. The areas considered were:

- Advanced nutrition.
- Advanced inflammatory bowel disease (IBD).
- Advanced endoscopy (ERCP and EUS).

Training in nutrition and IBD is required for all trainees. There are centres in the UK where patients with complex nutritional needs are referred so appropriately trained staff are required to look after such patients as indeed they are for patients with complex inflammatory bowel disease. Although all trainees will be proficient in upper GI endoscopy by CCT and most will wish to become proficient in colonoscopy, the conference felt that achieving proficiency in ERCP and EUS required a dedicated period of intense training. To produce more gastroenterologists with EUS skills was seen as meeting an important need as there are insufficient numbers of specialists to meet the national demand.

There was some discussion as to whether the core curriculum should be radically redesigned with the aim of reducing the core content and developing a raft of modules so that by CCT trainees would have acquired both core skills and a number of additional modules. This was attractive to a number of delegates at the conference but was ultimately rejected principally for two reasons. The first was the impossibility of restructuring the entire UK training programme in a short space of time; the

second was that it was very uncertain that trusts would wish to appoint a gastroenterologist with substantially less breadth to their training than at present.

Nevertheless, there was unanimous recognition that the alterations in the 2010 curriculum may well be a stepping stone to a future in which a wider number of trainees would gain advanced specialist skills.

The notes of the meeting of 6<sup>th</sup> March were widely disseminated within the British Society of Gastroenterology and discussed at formal meetings of the BSG Training Committee as well as the SAC. The ideas were discussed at the BSG Strategy Group, by the trainees section of the BSG and by TiGs. The green light was given from all sections of the gastroenterology community including trainers and trainees to proceed with drafting the present document from the outlines above.

### **2.3 Training Pathway and Entry Requirements**

Specialty training in gastroenterology consists of core and higher speciality training. Core training provides physicians with: the ability to investigate, treat and diagnose patients with acute and chronic medical symptoms; and with high quality review skills for managing inpatients and outpatients. Higher speciality training then builds on these core skills to develop the specific competencies required to practise independently as a consultant gastroenterologist.

Core training may be completed in either a Core Medical Training (CMT) or Acute Care Common Stem (ACCS) programme. The full curriculum for specialty training in Gastroenterology therefore consists of the curriculum for either CMT or ACCS plus this specialty training curriculum for gastroenterology. Experience of clinical gastroenterology during core training is desirable although not essential.

Core Medical training programmes are designed to deliver core competencies as part of specialty training by acquisition of knowledge, skills and behaviours as assessed by the workplace-based assessments and the MRCP(UK). Programmes are usually for two years and are broad-based consisting of four to six placements in medical specialties. These placements over the two years must include direct involvement in the acute medical take. Trainees are asked to document their record of workplace-based assessments in an ePortfolio which will then be continued to document assessments in specialty training. Trainees completing core training will have a solid platform of common knowledge and skills from which to continue into Specialty Training at ST3, where these skills will be developed and combined with specialty knowledge and skills in order to award the trainee with a certificate of completion of training (CCT).

There are common competencies that should be acquired by all physicians during their training period starting within the undergraduate career and developed throughout the postgraduate career, for example communication, examination and history taking skills. These are initially defined for CMT and then developed further in the specialty. This curriculum supports the spiral nature of learning that underpins a trainee's continual development. It recognises that for many of the competences outlined there is a maturation process whereby practitioners become more adept and skilled as their career and experience progresses. It is intended that doctors should recognise that the acquisition of basic competences is often followed by an increasing sophistication and complexity of that competence throughout their career. This is reflected by increasing expertise in their chosen career pathway.



Completion of CMT or ACCS and acquisition of full MRCP (UK) will be required before entry into Specialty training at ST3 (2011 onwards).

The approved curriculum for CMT is a sub-set of the Curriculum for General Internal Medicine (GIM). A “Framework for CMT” has been created for the convenience of trainees, supervisors, tutors and programme directors. The body of the Framework document has been extracted from the approved curriculum but only includes the syllabus requirements for CMT and not the further requirements for acquiring a CCT in GIM.

### Diagrammatic Representation of Curricula:

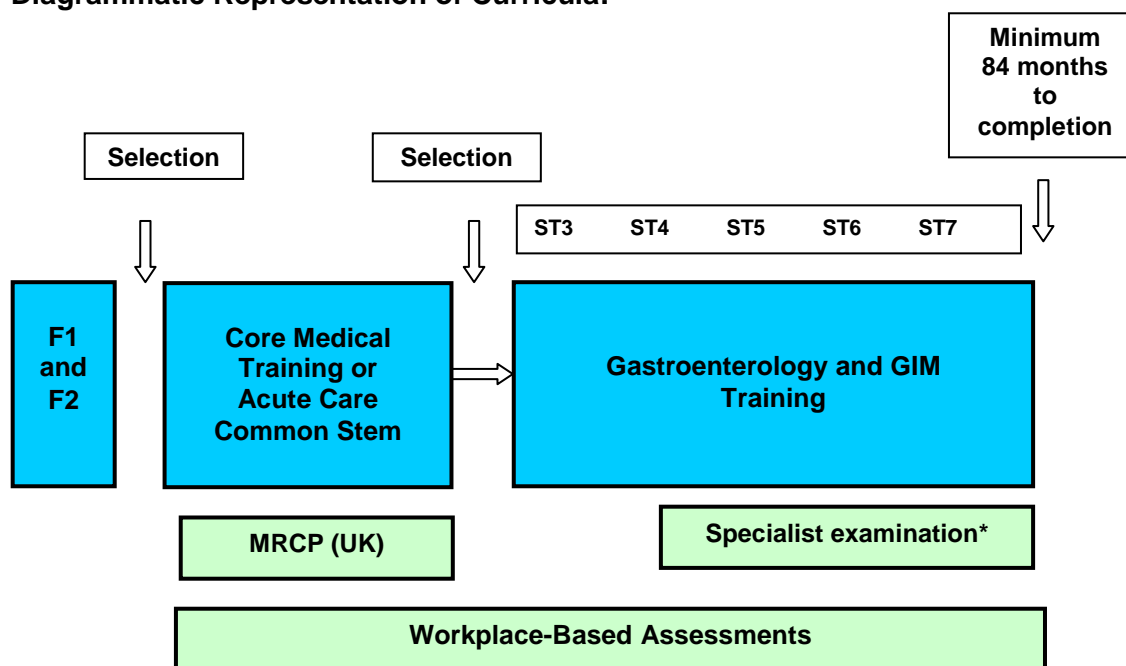


Diagram 1.1 - The training pathway for CCT in Gastroenterology and GIM

\*See section 5.3 for details

## 2.4 Enrolment with JRCPTB

Trainees are required to register for specialist training with JRCPTB at the start of their training programmes. Enrolment with JRCPTB, including the complete payment of enrolment fees, is required before JRCPTB will be able to recommend trainees for a CCT. Trainees can enrol online at [www.jrcptb.org.uk](http://www.jrcptb.org.uk)

## 2.5 Duration of Training

Although this curriculum is competency based, the duration of training must meet the European minimum of four years of full time specialty training - adjusted accordingly for flexible training (EU directive 2005/36/EC). The SAC has advised that joint training in GIM and gastroenterology from ST1 will usually be completed in seven years of full time training (two years CMT or ACCS plus five years specialty training).

## 2.6 Less than Full Time Training (LTFT)

Trainees who are unable to work full-time are entitled to opt for less than full time training programmes. EC Directive 2005/36/EC requires that:

- LTFT shall meet the same requirements as full-time training, from which it will differ only in the possibility of limiting participation in medical activities.
- The competent authorities shall ensure that the competencies achieved and the quality of part-time training are not less than those of full-time trainees.

The above provisions must be adhered to. LTFT trainees should undertake a pro rata share of the out-of-hours duties (including on-call and other out-of-hours commitments) required of their full-time colleagues in the same programme and at the equivalent stage.

EC Directive 2005/36/EC states that there is no longer a minimum time requirement on training for LTFT trainees. In the past, less than full time trainees were required to work a minimum of 50% of full time. With competence-based training, in order to retain competence, in addition to acquiring new skills, less than full time trainees would still normally be expected to work a minimum of 50% of full time. If you are returning or converting to training at less than full time please complete the LTFT application form on the JRCPTB website [www.jrcptb.org.uk](http://www.jrcptb.org.uk).

Funding for LTFT is from deaneries and these posts are not supernumerary. Ideally therefore 2 LTFT trainees should share one post to provide appropriate service cover.

Less than full time trainees should assume that their clinical training will be of a duration pro-rata with the time indicated/recommended, but this should be reviewed during annual appraisal by their TPD and chair of STC and Deanery Associate Dean for LTFT training. As long as the statutory European Minimum Training Time (if relevant), has been exceeded, then indicative training times as stated in curricula may be adjusted in line with the achievement of all stated competencies.

## 2.7 Dual Certification of Completion of Training

Trainees who wish to achieve a CCT in General Internal Medicine (GIM) as well as Gastroenterology must have applied for and successfully entered a training programme which was advertised openly as a dual training programme. Trainees will need to show evidence of achieving the various competencies required in both the Gastroenterology and GIM curricula. Postgraduate Deans wishing to advertise such programmes should ensure that they meet the requirements of both SACs curricula. Trainees seeking sub-certification in Hepatology must have applied in open competition for one of the 16 approved training posts – normally undertaken in the penultimate year of training and for CCT will also be required to have shown evidence of competencies in that sub-specialty as specified in the separate curriculum.

## 3 Content of Learning

### 3.1 Programme Content and Objectives

This section comprises the Knowledge and Skills that have to be learned as well as Behaviours that have to be displayed in order to practise independently as a specialist gastroenterologist.

It is divided into three sections

1. Common Competencies for all Doctors
2. Core Competencies for all Specialist Gastroenterologists.

In essence, the curriculum is designed to produce a broadly trained gastroenterologist who, while potentially having gained particular experience in individual areas, will still be competent to deliver high quality of care to all patients presenting with gastrointestinal or liver disease. Major changes in the 2010 syllabus for clinical gastroenterology compared to that of 2007 are:

- A new section on Basic and Applied Science
- Stronger focus on Liver disease and Clinical Nutrition
- Endoscopic training mandatory only in Upper Gastrointestinal Endoscopy.

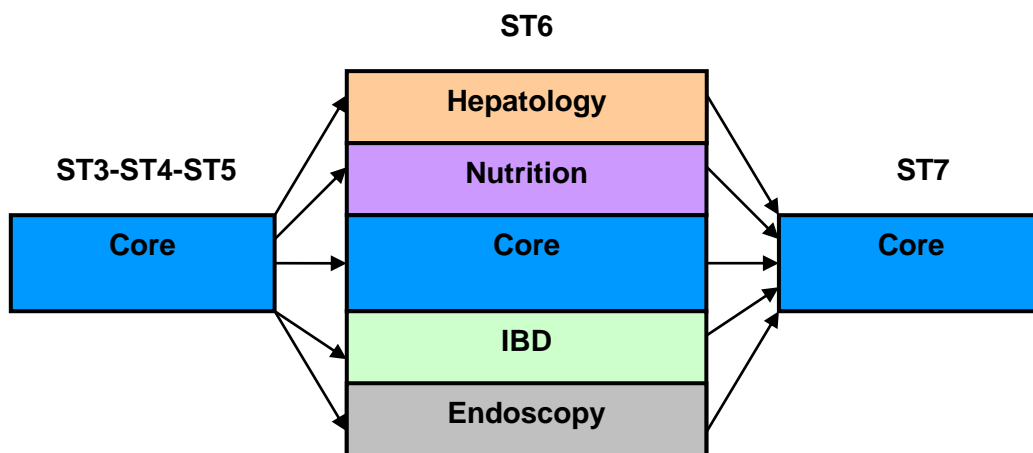
Expertise in gastric function tests and in flexible sigmoidoscopy is no longer required for CCT. Although the SAC in gastroenterology wish to encourage trainees most strongly to spend a period of time in research, it should be noted that no training credit can be given for periods of research – although it may be possible *ad personam* to grant some credit for clinical knowledge, skills and behaviours acquired where there is a significant component of clinical training during the time spent in research.

#### 3. Specialist Competencies

Most gastroenterologists appointed to consultant posts in the UK do practise very broadly and there is no evidence **at present** that this situation will change. Nevertheless, as gastroenterology has grown, some areas have become increasingly specialised and so the SAC recognises the widespread call from the gastroenterological community to develop a training programme to allow for further specialisation.

Training in the specialist areas of nutrition, IBD (inflammatory bowel disease) and ERCP (endoscopic retrograde cholangio-pancreatography) and EUS (endoscopic ultrasound) is covered in section 3 of this curriculum. Training in these will normally take place during the fourth year (ST6) of training and it is not proposed to seek formal sub-speciality status for these specialist areas.

**Hepatology** is an approved sub-specialty and is covered in a separate sub-specialty syllabus.



**Diagram 1.2– Outline of Specialist areas within training**

Trainees in advanced hepatology will continue to spend a full year of their training in the subspecialty area and follow the sub-specialty curriculum. Those training in one of the other three specialist areas will devote 50% of their time to training in the specialty area and the other 50% to continuing their broad training. They will gain particular experience in managing patients with complex IBD **or** complex nutritional needs **or** will have several training sessions in ERCP/EUS. They should be seen as posts not so much as having exclusive sub-speciality training (as will be the case with advanced hepatology) but there will be a strong focus on these additional skills. In this way, the SAC feels that it can meet the needs of the clinical demand to train some specialists with those specialised skills to practise modern clinical gastroenterology.

### 3.2 Good Medical Practice

In preparation for the introduction of licensing and revalidation, the General Medical Council has translated Good Medical Practice into a Framework for Appraisal and Assessment which provides a foundation for the development of the appraisal and assessment system for revalidation. The Framework can be accessed at [http://www.gmc-uk.org/Framework\\_4\\_3.pdf\\_25396256.pdf](http://www.gmc-uk.org/Framework_4_3.pdf_25396256.pdf)

The Framework for Appraisal and Assessment covers the following domains:

- Domain 1 – Knowledge, Skills and Performance
- Domain 2 – Safety and Quality
- Domain 3 – Communication, Partnership and Teamwork
- Domain 4 – Maintaining Trust

The “GMP” column in the syllabus defines which of the 4 domains of the Good Medical Practice Framework for Appraisal and Assessment are addressed by each competency. Most parts of the syllabus relate to “Knowledge, Skills and Performance” but some parts will also relate to other domains.

### 3.3 Syllabus

In the tables below, the “Assessment Methods” shown are those that are appropriate as **possible** methods that could be used to assess each competency. It is not expected that all competencies will be assessed and that where they are assessed not every method will be used. See section 5.3 for more details.

The specialty examination is referred to as the European Specialty Examination in Gastroenterology and Hepatology (ESEGH) in the syllabus tables below but was previously known as the Specialty Certificate Examination (SCE) until 2017.

“GMP” defines which of the 4 domains of the Good Medical Practice Framework for Appraisal and Assessment are addressed by each competency.

#### **Behaviours of Trainees in Gastroenterology**

The knowledge, skills and behaviours are specified in detail and in each section of the curriculum but we wish also to specify some generic behaviours that are expected of all trainees in gastroenterology. These include a number of behaviours that we strongly believe our trainees and specialists should acquire and demonstrate during professional practice. While the emphasis may vary according to the particular clinical context, these behaviours are largely generic. In this curriculum, it is expected that the trainee **will continuously exhibit all of the following behaviours throughout all areas of their practice**. Indeed, it is inconceivable that trainees and specialists should be dishonest or prejudiced, or that they should only try to communicate promptly with some professionals and not others.

For the sake of clarity and to avoid unnecessary repetition, these generic behaviours are not therefore repeatedly listed in every ‘Behaviours’ domain although, where particular aspects are felt to be specifically relevant or important, these are emphasised.

#### **Generic Behaviours**

Gastroenterologists should:

- Be sensitive, empathic, open and honest in communicating with patients and relatives, or carers/patient advocates as appropriate.
- Appropriately challenge lifestyle and social practices where relevant to health.
- Not be discriminating or judgemental with patients with any condition.
- Maintain knowledge, skills and competence in all areas of practice, through continued and self-directed education and reflection.
- Review performance and initiate appropriate personal CPD accordingly
- Strive to provide care based on evidence wherever possible.
- Be aware of limits of competence, seek advice from and refer appropriately to specialists, colleagues, and other members of the multidisciplinary team.
- Communicate promptly with all health professionals relevant to a patient’s care
- Prioritise clinical care, and be able to assess and treat patients with the appropriate degree of urgency.
- Give clear and realistic explanations in understandable language appropriate to the knowledge, understanding, cultural and psycho-social background of individual patients, including treatment options and alternatives.
- Manage patients with care and compassion.
- Involve patient and family as appropriate in decision making.
- Ensure and verify the patient’s understanding and the significance of informed consent.

- Participates fully in Quality Assurance and alters practice to improve quality through audit and reflection.
- Seek and adopt good management practice to enable the delivery of high quality service and work and use resources efficiently.
- Carry out routine and on-call duties conscientiously and reliably.
- Respond appropriately to untoward incidents and adverse events, and participate in standard governance and reporting procedures honestly and without prejudice.
- Practise in accordance with the core ethical principles.
- Direct patients to other sources of help, such as voluntary organisations, charities, and patient groups.

## Syllabus Content

1. Common Competencies .....	16
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a) Basic and Applied Science in Gastroenterology .....	58
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## 1. Common Competencies

Although the resources that gastroenterologists use to help reach a diagnosis are highly specialised and technically very sophisticated, in large part, clinical diagnosis relies on clinical - and very human – skills. A high proportion of patients that clinical gastroenterologists see have symptoms but not discernible disease. Clinicians rely, perhaps more than in any other medical speciality, on their fundamental clinical skills of taking a careful history from their patients. The best clinical gastroenterologists are listeners...and they are great listeners in that they hear (as well as listen to) what is being said to them.

It is crucial to the success of the patient-doctor interaction that a good rapport is established very early on in the consultation. This is especially true when the patient may have to describe symptoms that they find embarrassing. It is often the non-verbal clues that astute clinicians find so helpful in coming to a diagnosis. It really does not matter what sophisticated tests you can recommend, the diagnosis of irritable bowel syndrome (the commonest disorder for which patient are referred to a gastroenterologist) relies solely on how the doctor interprets the history – there are simply no diagnostic tests that can establish the diagnosis.

Of all the highly desirable common skills listed below, for a gastroenterologist, the crucial skill is the first. By putting the patient and their symptoms at the forefront, experienced clinical gastroenterologists know that all the technology at their command is just a means to an end.

It is precisely because gastroenterologists recognise the need for rapport with their patients that the portfolio of generic skills is, for them, such an important component of the curriculum.



## History Taking

**To develop the ability to elicit a relevant focused history from patients with increasingly complex issues and in increasingly challenging circumstances**

**To record the history accurately and synthesise this with relevant clinical examination, establish a problem list increasingly based on pattern recognition including differential diagnosis(es) and formulate a management plan that takes account of likely clinical evolution**

Knowledge		Assessment Methods	GMP
Recognises importance of different elements of history		mini-CEX	1
Recognises that patients do not present history in structured fashion		ACAT, mini-CEX	1, 3
Knows likely causes and risk factors for conditions relevant to mode of presentation		mini-CEX	1
Recognises that the patient's agenda and the history should inform examination, investigation and management		mini-CEX	1
Recognises the importance of social and cultural issues and practices that may have an impact on health		CbD	1
Skills			
Identifies and overcomes possible barriers to effective communication		mini-CEX	1, 3
Manages time and draws consultation to a close appropriately		mini-CEX	1, 3
Communicates effectively with patients from diverse backgrounds and those with special communication needs, such as the need for interpreters		mini-CEX, PS	1,3
Recognises that effective history taking in non-urgent cases may require several discussions with the patient and other parties, over time		ACAT, mini-CEX	1, 3
Supplements history with standardised instruments or questionnaires when relevant		ACAT, mini-CEX	1, 3
Manages alternative and conflicting views from family, carers, friends and members of the multi-professional team		ACAT, mini-CEX	1, 3
Assimilates history from the available information from patient and other sources including members of the multi-professional team		ACAT, mini-CEX	1, 3
Recognises and interprets appropriately the use of non verbal communication from patients and carers		mini-CEX	1, 3
Where values and perceptions of health and health promotion conflict, facilitates balanced and mutually respectful decision making		mini-CEX	1
Focuses on relevant aspects of history		ACAT, mini-CEX	1, 3
Maintains focus despite multiple and often conflicting agendas		ACAT, mini-CEX	1, 3
Behaviours			
Shows respect and behaves in accordance with Good Medical Practice		ACAT, mini-CEX	3, 4
Level Descriptor			
1	Obtains, records and presents accurate clinical history relevant to the clinical presentation Elicits most important positive and negative indicators of diagnosis, including an indication of patient's views		

	<p>Starts to screen out irrelevant information</p> <p>Is able to format notes in a logical way and writes legibly</p> <p>Records regular follow up notes</p>
2	<p>Demonstrates ability to obtain relevant focussed clinical history in the context of limited time e.g. outpatients, ward referral</p> <p>Demonstrates ability to target history to discriminate between likely clinical diagnoses</p> <p>Records information in most informative fashion</p> <p>Is able to write a summary of the case when the patient has been seen and clerked by a more junior colleagues</p> <p>Notes are always, comprehensive, focused and informative</p> <p>Is able accurately to summarise the details of patient notes</p> <p>Demonstrates an awareness that effective history taking needs to take due account of patient's beliefs and understanding</p>
3	<p>Demonstrates ability to rapidly obtain relevant history in context of severely ill patients</p> <p>Demonstrates ability to obtain history in difficult circumstances e.g. from angry or distressed patient / relatives, or where communication difficulties are significant</p> <p>Demonstrates ability to keep interview focussed on most important clinical issues</p> <p>Able to write timely, comprehensive, informative letters to patients and to GPs</p>
4	<p>Able to quickly focus questioning to establish working diagnosis and relate to relevant examination, investigation and management plan in most acute and common chronic conditions in almost any environment</p> <p>In the context of non-urgent cases, demonstrates an ability to use time effectively as part of the information collection process</p> <p>Writes succinct notes and is able to summarise accurately complex cases</p>

## Clinical Examination

**To develop the ability to perform focused, relevant and accurate clinical examination in patients with increasingly complex issues and in increasingly challenging circumstances**  
**To relate physical findings to history in order to establish diagnosis(es) and formulate a management plan**

Knowledge	Assessment Methods	GMP
Understands the need for a targeted and relevant clinical examination	CbD, mini-CEX	1
Understands the basis for clinical signs and the relevance of positive and negative physical signs	ACAT, CbD, mini-CEX	1
Recognises constraints (including those that are cultural and social) to performing physical examination and strategies that may be used to overcome them	CbD, mini-CEX	1
Be aware of the national and international situation regarding the distribution of disease, the factors that determine health and disease, and major population health responses	CbD	1
Recognise that personal beliefs and biases exist and understand their impact (positive and negative) on the delivery of health services	CbD	1
Recognises the limitations of physical examination and the need for adjunctive forms of assessment to confirm diagnosis	ACAT, CbD, mini-CEX	1
Recognises when the offer/ use of a chaperone is appropriate or	ACAT, CbD, mini-	1

required	CEX
<b>Skills</b>	
Performs an examination relevant to the presentation and risk factors that is valid, targeted and time efficient	ACAT, CbD, mini-CEX 1
Recognises the possibility of deliberate harm (both self harm and harm by others) in vulnerable patients and report to appropriate agencies	ACAT, CbD, mini-CEX 1, 2
Actively elicits important clinical findings	CbD, mini-CEX 1
Performs relevant adjunctive examinations	CbD, mini-CEX 1
<b>Behaviours</b>	
Shows respect and behaves in accordance with Good Medical Practice	CbD, mini-CEX, MSF 1, 4
Ensures examination, whilst clinically appropriate, considers social, cultural and religious boundaries to examination, appropriately communicates and makes alternative arrangements where necessary	CbD, mini-CEX, MSF 1, 4
<b>Level Descriptor</b>	
<b>1</b>	Performs, accurately, describes and records findings from basic physical examination Elicits most important physical signs Uses and interprets findings adjuncts to basic examination appropriately e.g. internal examination, blood pressure measurement, pulse oximetry, peak flow
<b>2</b>	Performs focussed clinical examination directed to presenting complaint e.g. cardiorespiratory, abdominal pain Actively seeks and elicits relevant positive and negative signs Uses and interprets findings adjuncts to basic examination appropriately e.g. electrocardiography, spirometry, ankle brachial pressure index, fundoscopy
<b>3</b>	Performs and interprets relevance advanced focussed clinical examination e.g. assessment of less common joints, neurological examination Elicits subtle findings Uses and interprets findings of advanced adjuncts to basic examination appropriately e.g. sigmoidoscopy, FAST ultrasound, echocardiography
<b>4</b>	Rapidly and accurately performs and interprets focussed clinical examination in challenging circumstances (e.g. acute medical or surgical emergency) or when managing multiple patient agendas

## Therapeutics and Safe Prescribing

**To develop your ability to prescribe, review and monitor appropriate therapeutic interventions relevant to clinical practice including non-medication-based therapeutic and preventative indications**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Indications, contraindications, side effects, drug interactions and dosage of commonly used drugs	ACAT, CbD, mini-CEX	1
Recalls range of adverse drug reactions to commonly used drugs, including complementary medicines	ACAT, CbD, mini-CEX	1

Recalls drugs requiring therapeutic drug monitoring and interpret results	ACAT, CbD, mini-CEX	1
Outlines tools to promote patient safety and prescribing, including electronic clinical record systems and other IT systems	ACAT, CbD, mini-CEX	1,2
Defines the effects of age, body size, organ dysfunction and concurrent illness on drug distribution and metabolism relevant to the trainee's practice	ACAT, CbD, mini-CEX	1,2
Recognises the roles of regulatory agencies involved in drug use, monitoring and licensing (e.g. National Institute for Clinical Excellence (NICE), Committee on Safety of Medicines (CSM), and Healthcare Products Regulatory Agency and hospital formulary committees	ACAT, CbD, mini-CEX	1,2
<b>Skills</b>		
Reviews the continuing need for, effect of and adverse effects of long term medications relevant to the trainee's clinical practice	ACAT, CbD, mini-CEX	1,2
Anticipates and avoids defined drug interactions, including complementary medicines	ACAT, CbD, mini-CEX	1
Advises patients (and carers) about important interactions and adverse drug effects	ACAT, CbD, mini-CEX	1,3
Prescribes appropriately in pregnancy, and during breast feeding	ACAT, CbD, mini-CEX	1
Makes appropriate dose adjustments following therapeutic drug monitoring, or physiological change (e.g. deteriorating renal function)	ACAT, CbD, mini-CEX	1
Uses IT prescribing tools where available to improve safety	ACAT, CbD, mini-CEX	1,2
Employs validated methods to improve patient concordance with prescribed medication	ACAT, mini-CEX	1,3
Provides comprehensible explanations to the patient, and carers when relevant, for the use of medicines and understands the principles of concordance in ensuring that drug regimes are followed	ACAT, CbD, mini-CEX	1,3
Understanding of the importance of non-medication based therapeutic interventions including the legitimate role of placebos	ACAT, CbD, mini-CEX	1,3
Where involved in "repeat prescribing," ensures safe systems for monitoring, review and authorisation	ACAT, CbD, mini-CEX	1
<b>Behaviours</b>		
Recognises the benefit of minimising number of medications taken by a patient to a level compatible with best care	ACAT, CbD, mini-CEX	1
Appreciates the role of non-medical prescribers	ACAT, CbD, mini-CEX	1,3
Remains open to advice from other health professionals on medication issues	ACAT, CbD, mini-CEX	1,3
Recognises the importance of resources when prescribing, including the role of a Drug Formulary and electronic prescribing systems	ACAT, CbD, mini-CEX	1,2
Ensures prescribing information is shared promptly and accurately between a patient's health providers, including between primary and secondary care	ACAT, CbD	1,3
Participates in adverse drug event reporting mechanisms	mini-CEX, CbD	1
Remains up to date with therapeutic alerts, and responds appropriately	ACAT, CbD	1

Level Descriptor	
1	<p>Understands the importance of patient compliance with prescribed medication</p> <p>Outlines the adverse effects of commonly prescribed medicines</p> <p>Uses reference works to ensure accurate, precise prescribing</p>
2	<p>Takes advice on the most appropriate medicine in all but the most common situations</p> <p>Makes sure an accurate record of prescribed medication is transmitted promptly to relevant others involved in an individual's care</p> <p>Knows indications for commonly used drugs that require monitoring to avoid adverse effects</p> <p>Modifies patients prescriptions to ensure the most appropriate medicines are used for any specific condition</p> <p>Maximises patient compliance by minimising the number of medicines required that is compatible with optimal patient care</p> <p>Maximises patient compliance by providing full explanations of the need for the medicines prescribed</p> <p>Is aware of the precise indications, dosages, adverse effects and modes of administration of the drugs used commonly within their specialty</p> <p>Uses databases and other reference works to ensure knowledge of new therapies and adverse effects is up to date</p> <p>Knows how to report adverse effects and take part in this mechanism</p>
3/4	<p>Is aware of the regulatory bodies relevant to prescribed medicines both locally and nationally</p> <p>Ensures that resources are used in the most effective way for patient benefit</p>

## Time Management and Decision Making

**To demonstrate increasing ability to prioritise and organise clinical and clerical duties in order to optimise patient care**

**To demonstrate improving ability to make appropriate clinical and clerical decisions in order to optimise the effectiveness of the clinical team resource**

Knowledge	Assessment Methods	GMP
Understands that effective organisation is key to time management	ACAT, CbD	1
Understands that some tasks are more urgent and/or more important than others	ACAT, CbD	1
Understands the need to prioritise work according to urgency and importance	ACAT, CbD	1
Maintains focus on individual patient needs whilst balancing multiple competing pressures	ACAT, CbD	1
Understands that some tasks may have to wait or be delegated to others	ACAT, CbD	1
Understands the roles, competences and capabilities of other professionals and support workers	ACAT, CbD	1
Outlines techniques for improving time management	ACAT, CbD	1
Understands the importance of prompt investigation, diagnosis and treatment in disease and illness management	ACAT, CbD, mini-CEX	1,2

<b>Skills</b>		
Identifies clinical and clerical tasks requiring attention or predicted to arise	ACAT, CbD, mini-CEX	1,2
Estimates the time likely to be required for essential tasks and plan accordingly	ACAT, CbD, mini-CEX	1
Groups together tasks when this will be the most effective way of working	ACAT, CbD, mini-CEX	1
Recognises the most urgent / important tasks and ensures that they managed expediently	ACAT, CbD, mini-CEX	1
Regularly reviews and re-prioritises personal and team work load	ACAT, CbD, mini-CEX	1
Organises and manages workload effectively and flexibly	ACAT, CbD, Mini-CEX	1
Makes appropriate use of other professionals and support workers	ACAT, CbD, mini-CEX	1
<b>Behaviours</b>		
Ability to work flexibly and deal with tasks in an effective and efficient fashion	ACAT, CbD, MSF	3
Recognises when you or others are falling behind and take steps to rectify the situation	ACAT, CbD, MSF	3
Communicates changes in priority to others	ACAT, MSF	1
Remains calm in stressful or high pressure situations and adopts a timely, rational approach	ACAT, MSF	1
Appropriately recognises and handles uncertainty within the consultation	ACAT, MSF	1
<b>Level Descriptor</b>		
<b>1</b>	<p>Recognises the need to identify work and compiles a list of tasks</p> <p>Works systematically through tasks and attempts to prioritise</p> <p>Discusses the relative importance of tasks with more senior colleagues</p> <p>Understands importance of completing tasks and checks progress with more senior members of clinical team (doctors or nurses)</p> <p>Understands importance of communicating progress with other team members</p> <p>Able to express when finds workload too much</p>	
<b>2</b>	<p>Organises work appropriately well and is able to prioritise</p> <p>When unsure, always consults more senior member of team</p> <p>Able to work with and guide more junior colleagues and to take work from them if they are seeming to be overloaded</p> <p>Discusses work on a daily basis with more senior member of team</p> <p>Completes work in a timely fashion</p>	
<b>3</b>	<p>Able to organise own daily work efficiently and effectively and to supervise work of others</p> <p>Is known to be reliable</p> <p>Able to manage to balance apparently competing tasks</p> <p>Recognises the most important tasks and responds appropriately</p> <p>Anticipates when priorities should be changed</p> <p>Starting to lead and direct the clinical team in effective fashion</p> <p>Supports others who are falling behind</p>	

	Requires minimal organisational supervision
4	Automatically prioritises, reprioritises and manages workload in most effective and efficient fashion Communicates and delegates rapidly and clearly Automatically responsible for organising the clinical team Is able to manage to supervise or guide the work of more than one team – e.g. out patient and ward team Calm leadership in stressful situations

## Decision Making and Clinical Reasoning

**To develop the ability to formulate a diagnostic and therapeutic plan for a patient according to the clinical information available**

**To develop the ability to prioritise the diagnostic and therapeutic plan**

**To be able to communicate a diagnostic and therapeutic plan appropriately**

Knowledge	Assessment Methods	GMP
Defines the steps of diagnostic reasoning:		
<ul style="list-style-type: none"> <li>Interprets history and clinical signs</li> </ul>	ACAT, CbD, mini-CEX	1
<ul style="list-style-type: none"> <li>Conceptualises clinical problem in a medical and social context</li> </ul>	ACAT, CbD, mini-CEX	1
<ul style="list-style-type: none"> <li>Understands the psychological component of disease and illness presentation</li> </ul>	ACAT, CbD, mini-CEX	1
<ul style="list-style-type: none"> <li>Generates hypothesis within context of clinical likelihood</li> </ul>	ACAT, CbD, mini-CEX	1
<ul style="list-style-type: none"> <li>Tests, refines and verifies hypotheses</li> </ul>	ACAT, CbD, mini-CEX	1
<ul style="list-style-type: none"> <li>Develops problem list and action plan</li> </ul>	ACAT, CbD, mini-CEX	1
<ul style="list-style-type: none"> <li>Recognises how to use expert advice, clinical guidelines and algorithms</li> </ul>	ACAT, CbD, mini-CEX	1
<ul style="list-style-type: none"> <li>Recognises and appropriately responds to sources of information accessed by patients</li> </ul>	ACAT, CbD, mini-CEX	1
Recognises the need to determine the best value and most effective treatment both for the individual patient and for a patient cohort	ACAT, CbD, mini-CEX	1,2
Defines the concepts of disease natural history and assessment of risk	ACAT, CbD, mini-CEX	1
Recalls methods and associated problems of quantifying risk e.g. cohort studies	ACAT, CbD	1
Outlines the concepts and drawbacks of quantitative assessment of risk or benefit e.g. numbers needed to treat	ACAT, CbD	1
Describes commonly used statistical methodology	CbD, mini-CEX	1
Knows how relative and absolute risks are derived and the meaning of the terms' predictive value, sensitivity and specificity in relation to diagnostic tests	CbD, mini-CEX	1



<b>Skills</b>		
Interprets clinical features, their reliability and relevance to clinical scenarios including recognition of the breadth of presentation of common disorders	ACAT, CbD, mini-CEX	1
Incorporates an understanding of the psychological and social elements of clinical scenarios into decision making through a robust process of clinical reasoning	ACAT, CbD, mini-CEX	1
Recognises critical illness and responds with due urgency	ACAT, CbD, mini-CEX	1
Generates plausible hypothesis(es) following patient assessment	ACAT, CbD, mini-CEX	1
Constructs a concise and applicable problem list using available information	ACAT, CbD, mini-CEX	1
Constructs an appropriate management plan in conjunction with the patient, carers and other members of the clinical team and communicates this effectively to the patient, parents and carers where relevant	ACAT, CbD, mini-CEX	1,3,4
Defines the relevance of an estimated risk of a future event to an individual patient	ACAT, CbD, mini-CEX	1
Uses risk calculators appropriately	ACAT, CbD, mini-CEX	1
Considers the risks and benefits of screening investigations	ACAT, CbD, mini-CEX	1
Applies quantitative data of risks and benefits of therapeutic intervention to an individual patient	ACAT, CbD, mini-CEX	1
Searches and comprehends medical literature to guide reasoning	AA, CbD	1
<b>Behaviours</b>		
Recognises the difficulties in predicting occurrence of future events	ACAT, CbD, mini-CEX	1
Shows willingness to discuss intelligibly with a patient the notion and difficulties of prediction of future events, and benefit/risk balance of therapeutic intervention	ACAT, CbD, mini-CEX	3
Shows willingness to adapt and adjust approaches according to the beliefs and preferences of the patient and/or carers	ACAT, CbD, mini-CEX	3
Is willing to facilitate patient choice	ACAT, CbD, mini-CEX	3
Shows willingness to search for evidence to support clinical decision making	ACAT, CbD, mini-CEX	1,4
Demonstrates ability to identify one's own biases and inconsistencies in clinical reasoning	ACAT, CbD, mini-CEX	1,3
<b>Level Descriptor</b>		
<b>1</b>	<p>In a straightforward clinical case:</p> <ul style="list-style-type: none"> <li>• Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence</li> <li>• Institutes an appropriate investigative plan</li> <li>• Institutes an appropriate therapeutic plan</li> <li>• Seeks appropriate support from others</li> </ul>	



	<ul style="list-style-type: none"> <li>• Takes account of the patient's wishes and records them accurately and succinctly</li> </ul>
<b>2</b>	<p>In a difficult clinical case:</p> <ul style="list-style-type: none"> <li>• Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence</li> <li>• Institutes an appropriate investigative plan</li> <li>• Institutes an appropriate therapeutic plan</li> <li>• Seeks appropriate support from others</li> <li>• Takes account of the patient's wishes and records them accurately and succinctly</li> </ul>
<b>3/4</b>	<p>In a complex, non-emergency case:</p> <ul style="list-style-type: none"> <li>• Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence</li> <li>• Institutes an appropriate investigative plan</li> <li>• Institutes an appropriate therapeutic plan</li> <li>• Seeks appropriate support from others</li> <li>• Takes account of the patient's wishes and records them accurately and succinctly</li> </ul>

## The Patient as Central Focus of Care

**To develop the ability to prioritise the patient's agenda encompassing their beliefs, concerns expectations and needs**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Outlines health needs of particular populations e.g. ethnic minorities and recognises the impact of health beliefs, culture and ethnicity in presentations of physical and psychological conditions	ACAT, CbD	1
Ensure that all decisions and actions are in the best interests of the patient and the public good	CbD	1
<b>Skills</b>		
Gives adequate time for patients and carers to express their beliefs ideas, concerns and expectations	ACAT, mini-CEX	1, 3, 4
Responds to questions honestly and seek advice if unable to answer	ACAT, CbD, mini-CEX	3
Encourages the health care team to respect the philosophy of patient focussed care	ACAT, CbD, mini-CEX, MSF	3
Develops a self-management plan with the patient	ACAT, CbD, mini-CEX	1, 3
Supports patients, parents and carers where relevant to comply with management plans	ACAT, CbD, mini-CEX, PS	3
Encourages patients to voice their preferences and personal choices about their care	ACAT, mini-CEX, PS	3
Respond to people in an ethical, honest and non-judgmental manner	CbD	1,3,4
<b>Behaviours</b>		
Supports patient self-management	ACAT, CbD, mini-CEX, PS	3
Respond to questions honestly and seek advice if unable to answer	ACAT, CbD, mini-	3

		CEX	
	Recognises the duty of the medical professional to act as patient advocate	ACAT, CbD, mini-CEX, MSF, PS	3, 4
<b>Level Descriptor</b>			
<b>1</b>	<p>Responds honestly and promptly to patient questions but knows when to refer for senior help</p> <p>Recognises the need for disparate approaches to individual patients</p> <p>Is always respectful to patients</p> <p>Introduces self clearly to patients and indicates own place in team</p> <p>Always checks that patient is comfortable and willing to be seen; asks about and explains all elements of examination before undertaking even taking a pulse</p> <p>Always warns patient of any procedure and is aware of the notion of implicit consent</p> <p>Never undertakes consent for a procedure that he/she is not competent to do</p> <p>Always seeks senior help when does not know answer to patient's queries</p> <p>Always asks patient if there is anything else they need to know or ask</p>		
<b>2</b>	<p>Recognises more complex situations of communication, accommodates disparate needs and develops strategies to cope</p> <p>Is sensitive to patient's own cultural concerns and norms</p> <p>Is able to explain diagnoses and medical procedures in ways that enable patient to understand and make decisions about their own health care</p>		
<b>3/4</b>	<p>Deals rapidly with more complex situations, promotes patient's self care and ensures all opportunities are outlined</p> <p>Is able to discuss complex questions and uncertainties with patients and to enable them to make decisions about difficult aspects of their health – e.g. to opt for no treatment or to make end of life decisions</p>		

## Prioritisation of Patient Safety in Clinical Practice

- To understand that patient safety depends on the effective and efficient organisation of care, and health care staff working well together**
- To understand that patient safety depends on safe systems not just individual competency and safe practice**
- To never compromise patient safety**
- To understand the risks of treatments and to discuss these honestly and openly with patients so that patients are able to make decisions about risks and treatment options**
- To ensure that all staff are aware of risks and work together to minimise risk**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Outlines the features of a safe working environment	ACAT, CbD, mini-CEX	1
Outlines the hazards of medical equipment in common use	ACAT, CbD	1
Recalls side effects and contraindications of medications prescribed	ACAT, CbD, mini-CEX	1
Recalls principles of risk assessment and management	CbD	1
Recalls the components of safe working practice in the personal, clinical and organisational settings	ACAT, CbD	1
Outlines local procedures and protocols for optimal practice e.g. GI	ACAT, CbD, mini-	1

bleed protocol, safe prescribing	CEX	
Understands the investigation of significant events, serious untoward incidents and near misses	ACAT, CbD, mini-CEX	1
<b>Skills</b>		
Recognises limits of own professional competence and only practises within these	ACAT, CbD, mini-CEX	1
Recognises when a patient is not responding to treatment and reassesses the situation; encourages others to do the same	ACAT, CbD, mini-CEX	1
Ensures the correct and safe use of medical equipment, ensuring faulty equipment is reported appropriately	ACAT, CbD, mini-CEX	1
Improves patients' and colleagues' understanding of the side effects and contraindications of therapeutic intervention	ACAT, CbD, mini-CEX	1, 3
Sensitively counsels a colleague following a significant untoward event, or near incident, to encourage improvement in practice of individual and unit	ACAT, CbD	3
Recognises and responds to the manifestations of a patient's deterioration or lack of improvement (symptoms, signs, observations, and laboratory results) and supports other members of the team to act similarly	ACAT, CbD, mini-CEX, MSF	1
<b>Behaviours</b>		
Continues to maintain a high level of safety awareness and consciousness at all times	ACAT, CbD, mini-CEX	2
Encourages feedback from all members of the team on safety issues	ACAT, CbD, mini-CEX, MSF	3
Reports serious untoward incidents and near misses and co-operates with the investigation of the same	ACAT, CbD, mini-CEX, MSF	3
Shows willingness to take action when concerns are raised about performance of members of the healthcare team, and acts appropriately when these concerns are voiced to you by others	ACAT, CbD, mini-CEX, MSF	3
Continues to be aware of one's own limitations, and operates within them competently	ACAT, CbD, mini-CEX	1
<b>Level Descriptor</b>		
<b>1</b>	<p>Respects and follows ward protocols and guidelines</p> <p>Takes direction from the nursing staff as well as medical team on matters related to patient safety</p> <p>Discusses risks of treatments with patients and is able to help patients make decisions about their treatment</p> <p>Does not hurry patients into decisions</p> <p>Always ensures the safe use of equipment</p> <p>Follows guidelines unless there is a clear reason for doing otherwise</p> <p>Acts promptly when a patient's condition deteriorates</p> <p>Always escalates concerns promptly</p>	
<b>2</b>	<p>Demonstrates ability to lead team discussion on risk assessment and risk management and to work with the team to make organisational changes that will reduce risk and improve safety</p> <p>Understands the relationship between good team working and patient safety</p> <p>Is able to work with and when appropriate lead the whole clinical team</p> <p>Promotes patient's safety to more junior colleagues</p> <p>Recognises untoward or significant events and always reports these. Leads discussion of causes of clinical incidents with staff and enables them to reflect on the causes. Able to undertake a root</p>	

	cause analysis
<b>3</b>	Able to assess the risks across the system of care and to work with colleagues from different department or sectors to ensure safety across the health care system Involves the whole clinical team in discussions about patient safety Shows support for junior colleagues who are involved in untoward events
<b>4</b>	Is fastidious about following safety protocols and ensures that junior colleagues to do the same. Is able to explain the rationale for protocols Demonstrates ability to lead an investigation of a serious untoward incident or near miss and synthesise an analysis of the issues and plan for resolution or adaptation

## Team Working and Patient Safety

**To develop the ability to work well in a variety of different teams and team settings – for example the ward team and the infection control team – and to contribute to discussion on the team’s role in patient safety**

**To develop the leadership skills necessary to lead teams so that they are more effective and better able to deliver safer care**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Outlines the components of effective collaboration and team working	ACAT, CbD	1
Describes the roles and responsibilities of members of the healthcare team	ACAT, CbD	1
Outlines factors adversely affecting a doctor’s and team performance and methods to rectify these	CbD	1
<b>Skills</b>		
Practises with attention to the important steps of providing good continuity of care	ACAT, CbD, mini-CEX	1, 3, 4
Accurate attributable note-keeping, including appropriate use of electronic clinical record systems	ACAT, CbD, mini-CEX	1, 3
Prepares patient lists with clarification of problems and ongoing care plan	ACAT, CbD, mini-CEX, MSF	1
Detailed hand over between shifts and areas of care	ACAT, CbD, mini-CEX, MSF	1, 3
Demonstrates leadership and management in the following areas: <ul style="list-style-type: none"> <li>• Education and training of junior colleagues and other members of the healthcare team</li> <li>• Deteriorating performance of colleagues (e.g. stress, fatigue)</li> <li>• High quality care</li> <li>• Effective handover of care between shifts and teams</li> </ul>	ACAT, CbD, mini-CEX	1, 2, 3
Leads and participates in interdisciplinary team meetings	ACAT, CbD, mini-CEX	3
Provides appropriate supervision to less experienced colleagues	ACAT, CbD, MSF	3

<b>Behaviours</b>			
	Encourages an open environment to foster and explore concerns and issues about the functioning and safety of team working	ACAT, CbD, MSF	3
	Recognises limits of own professional competence and only practises within these	ACAT, CbD, MSF	3
	Recognises and respects the request for a second opinion	ACAT, CbD, MSF	3
	Recognises the importance of induction for new members of a team	ACAT, CbD, MSF	3
	Recognises the importance of prompt and accurate information sharing with Primary Care team following hospital discharge	ACAT, CbD, mini-CEX, MSF	3
<b>Level Descriptor</b>			
<b>1</b>	Works well within the multidisciplinary team and recognises when assistance is required from the relevant team member Demonstrates awareness of own contribution to patient safety within a team and is able to outline the roles of other team members Keeps records up-to-date and legible and relevant to the safe progress of the patient Hands over care in a precise, timely and effective manner		
<b>2</b>	Demonstrates ability to discuss problems within a team to senior colleagues. Provides an analysis and plan for change Demonstrates ability to work with the virtual team to develop the ability to work well in a variety of different teams – for example the ward team and the infection control team – and to contribute to discussion on the team's role in patient safety Develops the leadership skills necessary to lead teams so that they are more effective and able to deliver better safer care		
<b>3</b>	Leads multidisciplinary team meetings but promotes contribution from all team members Recognises need for optimal team dynamics and promotes conflict resolution Demonstrates ability to convey to patients after a handover of care that, although there is a different team, the care is continuous		
<b>4</b>	Leads multi-disciplinary team meetings allowing all voices to be heard and considered; fosters an atmosphere of collaboration Recognises situations in which others are better equipped to lead or where delegation is appropriate Demonstrates ability to work with the virtual team Ensures that team functioning is maintained at all times Promotes rapid conflict resolution		

## **Principles of Quality and Safety Improvement**

**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**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Understands the elements of clinical governance	CbD, MSF	1
Recognises that governance safeguards high standards of care and facilitates the development of improved clinical services	CbD, MSF	1, 2
Defines local and national significant event reporting systems relevant to specialty	ACAT, CbD, mini-CEX	1

Recognises importance of evidence-based practice in relation to clinical effectiveness	CbD	1
Outlines local health and safety protocols (fire, manual handling etc)	CbD	1
Understands risk associated with the trainee's specialty work including biohazards and mechanisms to reduce risk	CbD	1
Outlines the use of patient early warning systems to detect clinical deterioration where relevant to the trainee's clinical specialty	ACAT, CbD, mini-CEX	1
Keeps abreast of national patient safety initiatives including National Patient Safety Agency , NCEPOD reports, NICE guidelines etc	ACAT, CbD, mini-CEX	1
<b>Skills</b>		
Adopts strategies to reduce risk e.g. surgical pause	ACAT, CbD	1, 2
Contributes to quality improvement processes e.g. <ul style="list-style-type: none"> <li>• Audit of personal and departmental/directorate/practice performance</li> <li>• Errors / discrepancy meetings</li> <li>• Critical incident and near miss reporting</li> <li>• Unit morbidity and mortality meetings</li> <li>• Local and national databases</li> </ul>	AA, CbD	2
Maintains a portfolio of information and evidence, drawn from own medical practice	CbD	2
Reflects regularly on own standards of medical practice in accordance with GMC guidance on licensing and revalidation	AA	1,2,3,4
<b>Behaviours</b>		
Shows willingness to participate in safety improvement strategies such as critical incident reporting	CbD, MSF	3
Develops reflection in order to achieve insight into own professional practice	CbD, MSF	3
Demonstrates personal commitment to improve own performance in the light of feedback and assessment	CbD, MSF	3
Engages with an open no blame culture	CbD, MSF	3
Responds positively to outcomes of audit and quality improvement	CbD, MSF	1,3
Co-operates with changes necessary to improve service quality and safety	CbD, MSF	1,2
<b>Level Descriptor</b>		
<b>1</b>	Understands that clinical governance is the over-arching framework that unites a range of quality improvement activities. This safeguards high standards of care and facilitates the development of improved clinical services Maintains personal portfolio	
<b>2</b>	Able to define key elements of clinical governance i.e. understands the links between organisational function and processes and the care of individuals Engages in audit and understands the link between audit and quality and safety improvement	
<b>3</b>	Demonstrates personal and service performance Designs audit protocols and completes audit cycle through an understanding the relevant changes needed to improve care and is able to support the implementation of change	

<b>4</b>	Leads in review of patient safety issues Implements change to improve service Understands change management Engages and guides others to embrace high quality clinical governance
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## Infection Control

**To develop the ability to manage and control infection in patients, including controlling the risk of cross-infection, appropriately managing infection in individual patients, and working appropriately within the wider community to manage the risk posed by communicable diseases**

Knowledge	Assessment Methods	GMP
Understands the principles of infection control as defined by the GMC	ACAT, CbD, mini-CEX	1
Understands the principles of preventing infection in high risk groups (e.g. managing antibiotic use to reduce Clostridium difficile infection,) including understanding the local antibiotic prescribing policy	ACAT, CbD, mini-CEX	1
Understands the role of Notification of diseases within the UK and identifies the principle notifiable diseases for UK and international purposes	ACAT, CbD, mini-CEX	1
Understands the role of the Health Protection Agency and Consultants in Health Protection (previously Consultants in Communicable Disease Control – CCDC)	CbD, ACAT	1
Understands the role of the local authority in relation to infection control	ACAT, CbD, mini-CEX	1
Skills		
Recognises the potential for infection within patients being cared for	ACAT, CbD	1, 2
Counsels patient on matters of infection risk, transmission and control	ACAT, CbD, mini-CEX, PS	2, 3
Actively engages in local infection control procedures	ACAT, CbD	1
Actively engages in local infection control monitoring and reporting processes	ACAT, CbD	1, 2
Prescribes antibiotics according to local antibiotic guidelines and works with microbiological services where this is not possible	ACAT, CbD, mini-CEX	1
Recognises potential for cross-infection in clinical settings	ACAT, CbD, mini-CEX	1, 2
Practices aseptic technique whenever relevant	DOPS	1
Behaviours		
Encourages all staff, patients and relatives to observe infection control principles	ACAT, CbD, MSF	1, 3
Recognises the risk of personal ill-health as a risk to patients and colleagues in addition to its effect on performance	ACAT, CbD, MSF	1, 3
Level Descriptor		
<b>1</b>	Always follows local infection control protocols, including washing hands before and after seeing all patients	



	<p>Is able to explain infection control protocols to students and to patients and their relatives</p> <p>Always defers to the nursing team about matters of ward management</p> <p>Aware of infections of concern, including MRSA and C difficile</p> <p>Aware of the risks of nosocomial infections</p> <p>Understands the links between antibiotic prescription and the development of nosocomial infections</p> <p>Always discusses antibiotic use with a more senior colleague</p>
2	<p>Demonstrates ability to perform simple clinical procedures utilising effective aseptic technique</p> <p>Manages simple common infections in patients using first-line treatments</p> <p>Communicates effectively to the patient the need for treatment and any prevention messages to prevent re-infection or spread</p> <p>Liaises with diagnostic departments in relation to appropriate investigations and tests</p> <p>Knowledge of which diseases should be notified and undertake notification promptly</p>
3	<p>Demonstrates an ability to perform more complex clinical procedures whilst maintaining aseptic technique throughout</p> <p>Identifies potential for infection amongst high risk patients, obtaining appropriate investigations and considering the use of second line therapies</p> <p>Communicates effectively to patients and their relatives with regard to the infection, the need for treatment and any associated risks of therapy</p> <p>Works effectively with diagnostic departments in relation to identifying appropriate investigations and monitoring therapy</p> <p>Works in collaboration with external agencies in relation to reporting common notifiable diseases, and collaborates over any appropriate investigation or management</p>
4	<p>Demonstrates an ability to perform most complex clinical procedures whilst maintaining full aseptic precautions, including those procedures which require multiple staff in order to perform the procedure satisfactorily</p> <p>Identifies the possibility of unusual and uncommon infections and the potential for atypical presentation of more frequent infections. Manages these cases effectively with potential use of tertiary treatments being undertaken in collaboration with infection control specialists</p> <p>Works in collaboration with diagnostic departments to investigate and manage the most complex types of infection, including those potentially requiring isolation facilities</p> <p>Works in collaboration with external agencies to manage the potential for infection control within the wider community, including communicating effectively with the general public and liaising with regional and national bodies where appropriate</p>

## Managing Long Term Conditions and Promoting Patient Self-Care

**To work with patients and use their expertise to manage their condition collaboratively and in partnership, with mutual benefit**

**To pursue a holistic and long term approach to the planning and implementation of patient care, in particular to identify and facilitate the patient's role in their own care**

Knowledge	Assessment Methods	GMP
Describes the natural history of diseases and illnesses that run a chronic course	ACAT, CbD, mini-CEX	1
Defines the role of rehabilitation services and the multi-disciplinary team to facilitate long-term care	ACAT, CbD, mini-CEX	1
Outlines the concept of quality of life and how this can be measured,	CbD	1



whilst understanding the limitations of such measures for individual patients		
Work with an appropriate knowledge of guidance documents on supporting people with long term conditions to self care	CbD	1
Outlines the concept of patient self-care and the role of the expert patient	CbD, mini-CEX	1
Knows, understands and is able to compare and contrast the medical and social models of disability	CbD	1
Knows about and practises within the key provisions of disability discrimination and other contemporary legislation	CbD	1,4
Knows about the key provisions of disability discrimination legislation	CbD	1
Understands the relationship between local health, educational and social service provision including the voluntary sector	CbD	1
Be familiar with the range of agencies that can provide care and support in and out of hospital and how they can be accessed	CbD	1,3
<b>Skills</b>		
Develops and agrees on a management plan with the patient (and carers), ensuring comprehension to maximise self-care within care pathways where relevant	ACAT, CbD, mini-CEX	1, 3
Assess the patient's ability to access various services in the health and social system and offer appropriate assistance	CbD, mini-CEX	1,3
Advocate and facilitate appropriate self care	CbD, mini-CEX	1,3
Develops and sustains supportive relationships with patients with whom care will be prolonged and potentially life long	CbD, mini-CEX	1, 4
Provides relevant evidence-based information and, where appropriate, effective patient education, with support of the multi-disciplinary team	ACAT, CbD, mini-CEX	1, 3, 4
Promotes and encourages involvement of patients in appropriate support networks, both to receive support and to give support to others	CbD, PS	1, 3
Encourages and supports patients in accessing appropriate information	CbD, PS	1, 3
<b>Behaviours</b>		
Shows willingness and support for patient in his/her own advocacy, within the constraints of available resources and taking into account the best interests of the wider community	ACAT, CbD, mini-CEX	3, 4
Recognises the potential impact of long term conditions on the patient, family and friends	ACAT, CbD, mini-CEX	1
Provides relevant tools and devices when possible	ACAT, CbD, mini-CEX	1
Ensures equipment and devices relevant to the patient's care are discussed	CbD	1,2,3
Puts patients in touch with the relevant agency including the voluntary sector from where they can procure the items as appropriate	ACAT, CbD, mini-CEX	1, 3
Provides the relevant tools and devices when possible	ACAT, CbD, mini-CEX	1, 2
Shows willingness to facilitate access to the appropriate training and skills in order to develop the patient's confidence and competence to	ACAT, CbD, mini-CEX, PS	1, 3, 4

self care, and adapt appropriately as those members change over time		
Shows willingness to maintain a close working relationship with other members of the multi-disciplinary team, primary and community care	ACAT, CbD, mini-CEX, MSF	3
Shows a willingness to engage with expert patients and representatives of charities or networks that focus on diseases and recognises their role in supporting patients and their families/carers	CbD, PS	1,3,4
Recognises and respects the role of family, friends and carers in the management of the patient with a long term condition	ACAT, CbD, mini-CEX, PS	1, 3
Puts patients in touch with the relevant agency, including the voluntary sector from where they can procure the items as appropriate	CbD, PS	3,4
<b>Level Descriptor</b>		
<b>1</b>	Describes relevant long term conditions Understands that "quality of life" is an important goal of care and that this may have different meanings for each patient Is aware of the need for promotion of patient self care and independence Helps the patient to develop an active understanding of their condition and how they can be involved in self management	
<b>2</b>	Demonstrates awareness of management of relevant long term conditions Is aware of the tools and devices that can be used in long term conditions Is aware of external agencies that can improve patient care and/or provide support Provides the patient with evidence based information and assists the patient in understanding this material; utilises the team to promote excellent patient care	
<b>3</b>	Develops management plans in partnership with the patient that are pertinent to the patient's long term condition Can use relevant tools and devices in improving patient care Engages with relevant external agencies to promote improving patient care	
<b>4</b>	Provides leadership within the multidisciplinary team that is responsible for management of patients with long term conditions Helps the patient networks develop and strengthen	

## Relationships with Patients and Communication within a Consultation

<b>To recognise the need, and develop the abilities, to communicate effectively and sensitively with patients, relatives and carers</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
How to structure a consultation appropriately	ACAT, CbD, mini-CEX, PS	1
The importance of the patient's background, culture, education and preconceptions (beliefs, ideas, concerns, expectations) to the process	ACAT, CbD, mini-CEX, PS	1
<b>Skills</b>		
Establishes a rapport with the patient and any relevant others (e.g. carers)	ACAT, CbD, mini-CEX, PS	1, 3
Utilises open and closed questioning appropriately	CbD, mini-CEX, PS	1,3

Listens actively and questions sensitively to guide the patient and to clarify information	ACAT, mini-CEX, PS	1, 3
Identifies and manages communication barriers, tailoring language to the individual patient and others, and using interpreters when indicated	ACAT, CbD, mini-CEX, PS	1, 3
Delivers information compassionately, being alert to and managing their and your emotional response (anxiety, antipathy etc)	ACAT, CbD, mini-CEX	1, 3, 4
Uses, and refers patients to, appropriate written and other evidence based information sources	ACAT, CbD, mini-CEX	1, 3
Checks the patient's/carer's understanding, ensuring that all their concerns/questions have been covered	ACAT, CbD, mini-CEX	1, 3
Indicates when the consultation is nearing its end and concludes with a summary and appropriate action plan; asks the patient to summarise back to check his/her understanding	ACAT, CbD, mini-CEX	1, 3
Makes accurate contemporaneous records of the discussion	ACAT, CbD, mini-CEX	1, 3
Manages follow-up effectively and safely, utilising a variety if methods (e.g. phone call, email, letter)	ACAT, CbD, mini-CEX	1
Ensures appropriate referral and communications with other healthcare professional resulting from the consultation are made accurately and in a timely manner	CbD, PS	1,3
<b>Behaviours</b>		
Approaches the situation with courtesy, empathy, compassion and professionalism, especially by appropriate body language and endeavouring to ensure an appropriate physical environment - act as an equal not a superior	ACAT, CbD, mini-CEX, MSF, PS	1, 3, 4
Ensures appropriate personal language and behaviour	CbD, PS	1,3
Ensures that the approach is inclusive and patient-centred, and respects the diversity of values in patients, carers and colleagues	ACAT, CbD, mini-CEX, MSF, PS	1, 3
Is willing to provide patients with a second opinion	ACAT, CbD, mini-CEX, MSF, PS	1, 3
Uses different methods of ethical reasoning to come to a balanced decision where complex and conflicting issues are involved	ACAT, CbD, mini-CEX, MSF	1, 3
Is confident and positive in own values	ACAT, CbD, mini-CEX	1, 3
<b>Level Descriptor</b>		
<b>1</b>	Conducts simple consultation with due empathy and sensitivity and writes accurate records thereof	
<b>2</b>	Conducts interviews on complex concepts satisfactorily, confirming that accurate two-way communication has occurred	
<b>3</b>	Handles communication difficulties appropriately, involving others as necessary; establishes excellent rapport	
<b>4</b>	Shows mastery of patient communication in all situations, anticipating and managing any difficulties which may occur	

## Breaking Bad News

**To recognise the fundamental importance of breaking bad news  
To develop strategies for skilled delivery of bad news according to the needs of individual patients and their relatives / carers**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
How bad news is delivered irretrievably affects the subsequent relationship with the patient	ACAT, CbD, mini-CEX, MSF, PS	1
Every patient may desire different levels of explanation and have different responses to bad news	ACAT, CbD, mini-CEX, PS	1, 4
That bad news is confidential but the patient may wish to be accompanied	ACAT, CbD, mini-CEX, PS	1
Once the news is given, patients are unlikely to take anything subsequent in, so an early further appointment should be made	CbD, mini-CEX, PS	1,3
Breaking bad news can be extremely stressful for the doctor or professional involved	ACAT, CbD, mini-CEX	1, 3
The interview at which bad news is given may be an educational opportunity	ACAT, CbD, mini-CEX	1
It is important to: <ul style="list-style-type: none"> <li>• Prepare for breaking bad news</li> <li>• Set aside sufficient uninterrupted time</li> <li>• Choose an appropriate private environment and ensure that there will be no unplanned disturbances</li> <li>• Have sufficient information regarding prognosis and treatment</li> <li>• Ensure the individual has appropriate support if desired</li> <li>• Structure the interview</li> <li>• Be honest, factual, realistic and empathic</li> <li>• Be aware of relevant guidance documents</li> </ul>	ACAT, CbD, mini-CEX	1, 3
'Bad news' may be expected or unexpected and it cannot always be predicted	ACAT, CbD, mini-CEX	1
Sensitive communication of bad news is an essential part of professional practice	ACAT, CbD, mini-CEX	1
'Bad news' has different connotations depending on the context, individual, social and cultural circumstances	ACAT, CbD, mini-CEX, PS	1
That a post mortem examination may be required and understand what this involves	ACAT, CbD, mini-CEX, PS	1
The local organ retrieval process	ACAT, CbD, mini-CEX	1
<b>Skills</b>		
Demonstrates to others good practice in breaking bad news	CbD, DOPS, MSF	1, 3
Involves patients and carers in decisions regarding their future management	CbD, DOPS, MSF	1, 3, 4
Recognises the impact of the bad news on the patient, carer, supporters, staff members and self	CbD, MSF	1,3
Encourages questioning and ensures comprehension	CbD, DOPS, MSF	1, 3

Responds to verbal and visual cues from patients and relatives	CbD, DOPS, MSF	1, 3
Acts with empathy, honesty and sensitivity, avoiding undue optimism or pessimism	CbD, DOPS, MSF	1, 3
Structures the interview, for example: <ul style="list-style-type: none"> <li>• Sets the scene</li> <li>• Establishes understanding</li> <li>• Discusses diagnosis(es), implications, treatment, prognosis and subsequent care</li> </ul>	CbD, DOPS, MSF	1, 3
<b>Behaviours</b>		
Takes leadership in breaking bad news	CbD, DOPS, MSF	1
Respects the different ways people react to bad news	CbD, DOPS, MSF	1
Ensures appropriate recognition and management of the impact of breaking bad news on the doctor	CbD, DOPS, MSF	1
<b>Level Descriptor</b>		
<b>1</b>	Recognises when bad news must be imparted Recognises the need to develop specific skills Requires guidance to deal with most cases	
<b>2</b>	Able to break bad news in planned settings with preparatory discussion with seniors Prepares well for interview Prepares patient to receive bad news Responsive to patient reactions	
<b>3</b>	Able to break bad news in unexpected and planned settings Structures the interview clearly Establishes what patient wants to know and ensures understanding Able to conclude interview	
<b>4</b>	Skilfully delivers bad news in any circumstance including adverse events Arranges follow up as appropriate Able to teach others how to break bad news	

## Complaints and Medical Error

**To recognise the causes of error and to learn from them; to realise the importance of honesty and effective apology and to take a leadership role in the handling of complaints**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Basic consultation techniques and skills described for Foundation programme, including: <ul style="list-style-type: none"> <li>• Describes the local complaints procedure</li> <li>• Recognises factors likely to lead to complaints (poor communication, dishonesty, clinical errors, adverse clinical outcomes etc)</li> <li>• Adopts behaviour likely to prevent causes for complaints</li> <li>• Deals appropriately with concerned or dissatisfied patients or</li> </ul>	CbD, DOPS, MSF	1

	relatives		
	<ul style="list-style-type: none"> <li>Recognises when something has gone wrong and identifies appropriate staff to communicate this to</li> <li>Acts with honesty and sensitivity in a non-confrontational manner</li> </ul>		
	Outlines the principles of an effective apology	CbD, DOPS, MSF	1
	Identifies sources of help and support for patients and yourself when a complaint is made about yourself or a colleague	CbD, DOPS, MSF	1
<b>Skills</b>			
	Contributes to processes whereby complaints are reviewed and learned from	CbD, DOPS, MSF	1
	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	CbD, DOPS, MSF	1, 3
	Delivers an appropriate apology and explanation (either of error or for process of investigation of potential error and reporting of the same)	CbD, DOPS, MSF	1, 3, 4
	Distinguishes between system and individual errors (personal and organisational)	CbD, DOPS, MSF	1
	Shows an ability to learn from previous error	CbD, DOPS, MSF	1
<b>Behaviours</b>			
	Takes leadership over complaint issues	CbD, DOPS, MSF	1
	Recognises the impact of complaints and medical error on staff, patients, and the National Health Service	CbD, DOPS, MSF	1, 3
	Contributes to a fair and transparent culture around complaints and errors	CbD, DOPS, MSF	1
	Recognises the rights of patients, family members and carers to make a complaint	CbD, DOPS, MSF	1, 4
	Recognises the impact of a complaint upon self and seeks appropriate help and support	CbD, DOPS, MSF	1,3,4
<b>Level Descriptor</b>			
1	If an error is made, immediately rectifies it and/or reports it Apologises to patient for any failure as soon as it is recognised, however small Understands and describes the local complaints procedure Recognises need for honesty in management of complaints Responds promptly to concerns that have been raised Understands the importance of an effective apology Learns from errors		
2	Manages conflict without confrontation Recognises and responds to the difference between system failure and individual error		
3	Recognises and manages the effects of any complaint within members of the team		
4	Provides timely, accurate written responses to complaints when required Provides leadership in the management of complaints		

## Communication with Colleagues and Cooperation

**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**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Understands the section in 'Good Medical Practice' on Working with Colleagues, in particular:	CbD, MSF	1
<ul style="list-style-type: none"> <li>The roles played by all members of a multi-disciplinary team</li> </ul>	CbD, MSF	1
<ul style="list-style-type: none"> <li>The features of good team dynamics</li> </ul>	CbD, MSF	1
<ul style="list-style-type: none"> <li>The principles of effective inter-professional collaboration to optimise patient, or population, care</li> </ul>	CbD, MSF	1
Understands the principles of confidentiality that provide boundaries to communication	CbD, MSF	1
<b>Skills</b>		
Communicates accurately, clearly, promptly and comprehensively with relevant colleagues by means appropriate to the urgency of a situation (telephone, email, letter etc), especially where responsibility for a patient's care is transferred	ACAT, CbD, mini-CEX	1, 3
Utilises the expertise of the whole multi-disciplinary team as appropriate, ensuring when delegating responsibility that appropriate supervision is maintained	ACAT, CbD, mini-CEX, MSF	1, 3
Participates in and co-ordinates an effective hospital-at-night or hospital out-of-hours team where relevant; participates effectively in General Practice out-of-hours	ACAT, CbD, mini-CEX, MSF	1
Communicates effectively with administrative bodies and support organisations	CbD, mini-CEX, MSF	1, 3
Employs behavioural management skills with colleagues to prevent and resolve conflict and enhance collaboration	ACAT, CbD, mini-CEX, MSF	1, 3
<b>Behaviours</b>		
Is aware of the importance of and takes part in multi-disciplinary teamwork, including adoption of a leadership role when appropriate but also recognising where others are better equipped to lead	ACAT, CbD, mini-CEX, MSF	3
Fosters a supportive and respectful environment where there is open and transparent communication between all team members	ACAT, CbD, mini-CEX, MSF	1, 3
Ensures appropriate confidentiality is maintained during communication with any member of the team	ACAT, CbD, mini-CEX, MSF	1, 3
Recognises the need for a healthy work/life balance for the whole team, including yourself, but take any leave yourself only after giving appropriate notice to ensure that cover is in place	CbD, mini-CEX, MSF	1
Is prepared to accept additional duties in situations of unavoidable and unpredictable absence of colleagues, ensuring that the best interests of the patient are paramount	CbD, MSF	1
<b>Level Descriptor</b>		
<b>1</b>	Accepts own role in the healthcare team and communicates appropriately with all relevant members thereof Knows who the other members of the team are and ensures effective communication	



<b>2</b>	Fully recognises the role of, and communicates appropriately with, all relevant potential team members (individual and corporate) Supports other members of the team; ensures that all are aware of their roles
<b>3</b>	Able to predict and manage conflict between members of the healthcare team
<b>4</b>	Able to take a leadership role as appropriate, fully respecting the skills, responsibilities and viewpoints of all team members

## Health Promotion and Public Health

**To develop the ability to work with individuals and communities to reduce levels of ill health, remove inequalities in healthcare provision and improve the general health of a community**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Understands the factors which influence the incidence and prevalence of common conditions	ACAT, CbD, mini-CEX	1
Understands the factors which influence health and illness – psychological, biological, social, cultural and economic especially poverty and unemployment	ACAT, CbD, mini-CEX	1
Understands the influence of lifestyle on health and the factors that influence an individual to change their lifestyle	ACAT, CbD, mini-CEX	1
Understands the influence of culture and beliefs on patient's perceptions of health	ACAT, CbD, mini-CEX	1
Understands the purpose of screening programmes and knows in outline the common programmes available within the UK	CbD, mini-CEX	1
Understands the positive and negative effects of screening on the individual	CbD, mini-CEX	1
Understands the possible positive and negative implications of health promotion activities (e.g. immunisation)	CbD, mini-CEX	1
Understands the relationship between the health of an individual and that of a community and vice versa	CbD, mini-CEX	1
Knows the key local concerns about health of communities such as smoking and obesity and the potential determinants	ACAT, CbD, mini-CEX	1
Understands the role of other agencies and factors, including the impact of globalisation in increasing disease and in protecting and promoting health	ACAT, CbD, mini-CEX	1
Demonstrates knowledge of the determinants of health worldwide and strategies to influence policy relating to health issues, including the impact of the developed world strategies on the third world	ACAT, CbD, mini-CEX	1
Outlines the major causes of global morbidity and mortality and effective, affordable interventions to reduce these	ACAT, CbD, mini-CEX	1
Recalls the effect of addictive and self harming behaviours, especially substance misuse and gambling, on personal and community health and poverty	ACAT, CbD, mini-CEX	1
<b>Skills</b>		
Identifies opportunities to prevent ill health and disease in patients	ACAT, CbD, mini-CEX, PS	1, 2



Identifies opportunities to promote changes in lifestyle and other actions which will positively improve health and/or disease outcomes.	ACAT, CbD, mini-CEX	1, 2
Identifies the interaction between mental, physical and social wellbeing in relation to health	ACAT, CbD, mini-CEX	1
Counsels patients appropriately on the benefits and risks of screening and health promotion activities	ACAT, CbD, mini-CEX, PS	1, 3
Identifies patient's ideas, concerns and health beliefs regarding screening and health promotions programmes and is capable of appropriately responding to these	CbD, mini-CEX,	1, 3
Works collaboratively with other agencies to improve the health of communities	CbD, mini-CEX	1
Recognises and is able to balance autonomy with social justice	CbD, mini-CEX	1, 3
<b>Behaviours</b>		
Engages in effective team-working around the improvement of health	ACAT, CbD, MSF	1, 3
Encourages, where appropriate, screening to facilitate early intervention	CbD	1
Seeks out and utilises opportunities for health promotion and disease prevention	CbD	1
<b>Level Descriptor</b>		
<b>1</b>	Discusses with patients others factors which could influence their personal health Maintains own health and is aware of own responsibility as a doctor for promoting healthy approach to life	
<b>2</b>	Supports an individual in a simple health promotion activity (e.g. smoking cessation)	
<b>3</b>	Knowledge of local public health and communicable disease networks Communicates to an individual and their relatives information about the factors which influence their personal health Supports small groups in a simple health promotion activity (e.g. smoking cessation) Provides information to an individual about a screening programme and offers information about its risks and benefits	
<b>4</b>	Discusses with small groups the factors that have an influence on their health and describes steps they can undertake to address these Provides 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 Engages with local or regional initiatives to improve individual health and reduce inequalities in health between communities	

## Principles of Medical Ethics and Confidentiality

To know, understand and apply appropriately the principles, guidance and laws regarding medical ethics and confidentiality

Knowledge	Assessment Methods	GMP
Demonstrates knowledge of the principles of medical ethics	ACAT, CbD, mini-CEX	1
Outlines and follows the guidance given by the GMC on confidentiality	ACAT, CbD, mini-CEX	1
Defines the provisions of the Data Protection Act and Freedom of Information Act	ACAT, CbD, mini-CEX	1
Defines the principles of Information Governance	CbD, mini-CEX	1
Defines the role of the Caldicott Guardian and Information Governance lead within an institution, and outlines the process of attaining Caldicott approval for audit or research	ACAT, CbD, mini-CEX	1, 4
Outlines situations where patient consent, while desirable, is not required for disclosure e.g. serious communicable diseases, public interest	ACAT, CbD, mini-CEX	1, 4
Outlines the procedures for seeking a patient's consent for disclosure of identifiable information	ACAT, CbD, mini-CEX	1
Recalls the obligations for confidentiality following a patient's death	ACAT, CbD, mini-CEX	1, 4
Recognises the problems posed by disclosure in the public interest, without patient's consent	ACAT, CbD, mini-CEX	1, 4
Recognises the factors influencing ethical decision making, including religion, personal and moral beliefs, cultural practices	ACAT, CbD, mini-CEX	1
Do not resuscitate – defines the standards of practice defined by the GMC when deciding to withhold or withdraw life-prolonging treatment	ACAT, CbD, mini-CEX	1
Recognises the role and legal standing of advance directives	ACAT, CbD, mini-CEX	1
Outlines the principles of the Mental Capacity Act	ACAT, CbD, mini-CEX	1
Skills		
Uses and shares information with the highest regard for confidentiality, and encourages such behaviour in other members of the team	ACAT, CbD, mini-CEX, MSF	1, 2, 3
Uses and promotes strategies to ensure confidentiality is maintained e.g. anonymisation	CbD	1
Counsels patients on the need for information distribution within members of the immediate healthcare team	ACAT, CbD, MSF	1, 3
Counsels patients, family, carers and advocates tactfully and effectively when making decisions about resuscitation status, and withholding or withdrawing treatment	ACAT, CbD, mini-CEX, PS	1, 3
Behaviours		
Encourages informed ethical reflection in others	ACAT, CbD, MSF	1
Shows willingness to seek advice of peers, legal bodies, and the	ACAT, CbD, mini-	1

GMC in the event of ethical dilemmas over disclosure and confidentiality	CEX, MSF	
Respects patient's requests for information not to be shared, unless this puts the patient, or others, at risk of harm	ACAT, Cbd, mini-CEX, PS	1, 4
Shows willingness to share information regarding care with patients, unless they have expressed a wish not to receive such information	ACAT, Cbd, mini-CEX	1, 3
Shows willingness to seek the opinion of others when making decisions about resuscitation status, and withholding or withdrawing treatment	ACAT, Cbd, mini-CEX, MSF	1, 3
<b>Level Descriptor</b>		
<b>1</b>	<p>Respects patient's confidentiality and their autonomy</p> <p>Understands, in respect of information about patients, the need for highest regard for confidentiality adhering to the Data Protection Act</p> <p>Keeps in mind when writing or storing data the importance of the Freedom of Information Act</p> <p>Knowledge of the guidance given by the GMC in respect of these two acts</p> <p>Understands that the information in patient's notes is theirs</p> <p>Only shares information outside the clinical team and the patient after discussion with senior colleagues</p> <p>Familiarity with the principles of the Mental Capacity Act; if in doubt about a patient's competence and ability to consent even to the most simple of acts (e.g. history taking or examination,) to discuss with a senior colleague</p> <p>Participates in decisions about resuscitation status and withholding or withdrawing treatment</p>	
<b>2</b>	<p>Counsels patient on the need for information distribution within members of the immediate healthcare team and seeks patient's consent for disclosure of identifiable information</p> <p>Discusses with patient with whom they would like information about their health to be shared</p>	
<b>3</b>	<p>Defines the role of the Caldicott Guardian within an institution, and outlines the process of attaining Caldicott approval for audit or research</p> <p>Understands the importance of considering the need for ethical approval when patient information is to be used for anything other than the individual's care</p> <p>Understands the difference between confidentiality and anonymity</p> <p>Knows the process for gaining ethical approval for research</p>	
<b>4</b>	<p>Able to assume a full role in making and implementing decisions about resuscitation status and withholding or withdrawing treatment</p> <p>Able to support the decision making on behalf of those who are not competent to make decisions about their own care</p>	

## Valid Consent

To understand the necessity of obtaining valid consent from the patient and how to obtain it		
Knowledge	Assessment Methods	GMP
<p>Outlines the guidance given by the GMC on consent, in particular:</p> <ul style="list-style-type: none"> <li>Understands that consent is a process that may culminate in, but is not limited to, the completion of a consent form</li> <li>Understands the particular importance of considering the patient's level of understanding and mental state (and also that of the parents, relatives or carers when appropriate) and how this may impair their capacity for informed consent</li> </ul>	CbD, DOPS, MSF	1
Skills		
Presents all information to patients (and carers) in a format they understand, checking understanding and allowing time for reflection on the decision to give consent	ACAT, CbD, mini-CEX, PS	1, 3
Understand the social and cultural issues that might affect consent	CbD, PS	1,3,4
Provides a balanced view of all care options	ACAT, CbD, mini-CEX, PS	1, 3, 4
Behaviours		
Respects a patient's rights of autonomy, even in situations where their decision might put them at risk of harm	ACAT, CbD, mini-CEX, PS	1
Does not exceed the scope of authority given by a competent patient	ACAT, CbD, mini-CEX, PS	1
Does not withhold information relevant to proposed care or treatment in a competent patient	ACAT, CbD, mini-CEX	1, 3, 4
Does not seek to obtain consent for procedures which they are not competent to perform, in accordance with GMC/regulatory	ACAT, CbD, mini-CEX	1, 3
Shows willingness to seek advance directives	CbD, PS	1,3,4
Shows willingness to obtain a second opinion, senior opinion and legal advice in difficult situations of consent or capacity	ACAT, CbD, mini-CEX, MSF	1, 3
Informs a patient and seeks alternative care where personal, moral or religious belief prevents a usual professional action	ACAT, CbD, mini-CEX, PS	1, 3, 4
Level descriptor		
1	<p>Understands that consent should be sought ideally by the person undertaking a procedure and if not by someone competent to undertake the procedure</p> <p>Understands consent as a process</p> <p>Ensures always to check for consent for the most simplest and non-invasive processes – e.g. history taking; understands the concept of “implicit consent”</p> <p>Obtains consent for straightforward treatments that he/she is competent to undertake with appropriate regard for patient's autonomy</p>	
2	<p>Able to explain complex treatments meaningfully in layman's terms and thereby to obtain appropriate consent</p> <p>Responds appropriately when a patient declines consent even when the procedure would, on balance of probability, benefit the patient</p>	
3	Obtains consent in 'grey-area' situations where the best option for the patient is not clear	
4	Obtains consent in all situations, even when there are problems of communication and capacity	

## Legal Framework for Practice

**To understand the legal framework within which healthcare is provided in the UK and/or devolved administrations in order to ensure that personal clinical practice is always provided in line with this legal framework**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
All decisions and actions must be in the best interests of the patient	ACAT, CbD, mini-CEX	1
Understands the legislative framework within which healthcare is provided in the UK and/or devolved administrations, in particular death certification and the role of the Coroner/Procurator Fiscal; child protection legislation; mental health legislation (including powers to detain a patient and giving emergency treatment against a patient's will under common law); advanced directives and living Wills; withdrawing and withholding treatment; decisions regarding resuscitation of patients; surrogate decision making; organ donation and retention; communicable disease notification; medical risk and driving; Data Protection and Freedom of Information Acts; provision of continuing care and community nursing care by a local authorities	ACAT, CbD, mini-CEX	1, 2
Understands the differences between health related legislation in the four countries of the UK	CbD	1
Understands sources of medical legal information	ACAT, CbD, mini-CEX	1
Understands disciplinary processes in relation to medical malpractice	ACAT, CbD, mini-CEX, MSF	1
Understands the role of the medical practitioner in relation to personal health and substance misuse, including understanding the procedure to be followed when such abuse is suspected	ACAT, CbD, mini-CEX, MSF	1
<b>Skills</b>		
Ability to cooperate with other agencies with regard to legal requirements, including reporting to the Coroner's/Procurator Officer, the Police or the proper officer of the local authority in relevant circumstances	ACAT, CbD, mini-CEX	1
Ability to prepare appropriate medical legal statements for submission to the Coroner's Court, Procurator Fiscal, Fatal Accident Inquiry and other legal proceedings	CbD, MSF	1
Is prepared to present such material in Court	CbD, mini-CEX	1
Incorporates legal principles into day-to-day practice	ACAT, CbD, mini-CEX	1
Practices and promotes accurate documentation within clinical practice	ACAT, CbD, mini-CEX	1, 3
<b>Behaviour</b>		
Shows willingness to seek advice from the employer, appropriate legal bodies (including defence societies), and the GMC on medico-legal matters	ACAT, CbD, mini-CEX, MSF	1
Promotes informed reflection on legal issues by members of the team; all decisions and actions must be in the best interests of the patient	ACAT, CbD, mini-CEX, MSF	1, 3
<b>Level Descriptor</b>		

1	Knows the legal framework associated with medical qualification and medical practice and the responsibilities of registration with the GMC Knows the limits to professional capabilities, particularly those of pre-registration doctors
2	Identifies to Senior Team Members cases which should be reported to external bodies and where appropriate, and initiates that report Identifies with Senior Members of the Clinical Team situations where you feel consideration of medical legal matters may be of benefit; is aware of local Trust procedures around substance abuse and clinical malpractice
3	Works with external strategy bodies around cases that should be reported to them; collaborates with them on complex cases preparing brief statements and reports as required Actively promotes discussion on medico-legal aspects of cases within the clinical environment Participates in decision making with regard to resuscitation decisions and around decisions related to driving, discussing the issues openly but sensitively with patients and relatives
4	Works with external strategy bodies around cases that should be reported to them; collaborates with them on complex cases providing full medical legal statements as required and present material in court where necessary Leads the clinical team in ensuring that medico-legal factors are considered openly and consistently wherever appropriate, in the care and best interests of the patient; ensures that patients and relatives are involved openly in all such decisions

## Ethical Research

### To ensure that research is undertaken using relevant ethical guidelines

Knowledge	Assessment Methods	GMP
Outlines the GMC guidance on good practice in research	ACAT, CbD	1
Understands the principles of research governance	AA, CbD, mini-CEX	1
Outlines the differences between audit and research	CbD, mini-CEX	1
Describes how clinical guidelines are produced	CbD	1
Demonstrates a knowledge of research principles	CbD, mini-CEX	1
Outlines the principles of formulating a research question and designing a project	CbD, mini-CEX	1
Comprehends principal qualitative, quantitative, bio-statistical and epidemiological research methods	CbD	1
Outlines sources of research funding	CbD	1
Understands the difference between population-based assessment and unit-based studies and is able to evaluate outcomes for epidemiological work	CbD	1
Skills		
Develops critical appraisal skills and applies these when reading literature	CbD	1
Demonstrates the ability to write a scientific paper	CbD	1
Applies for appropriate ethical research approval	CbD	1
Demonstrates the use of literature databases	CbD	1
Demonstrates good verbal and written presentations skills	CbD, DOPS	1

<b>Behaviour</b>		
Follows guidelines on ethical conduct in research and consent for research	CbD	1
Shows willingness to the promotion in research	CbD	1
<b>Level Descriptor</b>		
<b>1</b>	Defines ethical research and demonstrates awareness of GMC guidelines Differentiates audit and research and understands the different types of research approach e.g. qualitative and quantitative Knows how to use databases	
<b>2</b>	Demonstrates good presentation and writing skills Demonstrates critical appraisal skills and demonstrates ability to critically appraise a published paper	
<b>3</b>	Demonstrates ability to apply for appropriate ethical research approval Demonstrates knowledge of research organisation and funding sources Demonstrates ability to write a scientific paper	
<b>4</b>	Provides leadership in research Promotes research activity Formulates and develops research pathways	

### **Evidence and Guidelines**

**To develop the ability to make the optimal use of current best evidence in making decisions about the care of patients**

**To develop the ability to construct evidence based guidelines and protocols in relation to medical practise**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Understands of the application of statistics in scientific medical practice	MRCP Part 1, CbD	1
Understands the advantages and disadvantages of different study methodologies (randomised control trials, case controlled cohort etc)	MRCP Part 1, CbD	1
Understands the principles of critical appraisal	CbD	1
Understands levels of evidence and quality of evidence	CbD	1
Understands the role and limitations of evidence in the development of clinical guidelines and protocols	CbD	1
Understands the advantages and disadvantages of guidelines and protocols	CbD	1
Understands the processes that result in nationally applicable guidelines (e.g. NICE and SIGN)	CbD	1
Understands the relative strengths and limitations of both quantitative and qualitative studies, and the different types of each	CbD	1
<b>Skills</b>		
Ability to search the medical literature including use of PubMed, Medline, Cochrane reviews and the internet	CbD	1
Appraises retrieved evidence to address a clinical question	CbD	1

Applies conclusions from critical appraisal into clinical care	CbD	1
Identifies the limitations of research	CbD	1
Contributes to the construction, review and updating of local (and national) guidelines of good practice using the principles of evidence based medicine	CbD	1
<b>Behaviours</b>		
Keeps up to date with national reviews and guidelines of practice (e.g. NICE and SIGN)	CbD	1
Aims for best clinical practice (clinical effectiveness) at all times, responding to evidence-based medicine	ACAT, CbD, mini-CEX	1
Recognises the occasional need to practise outside clinical guidelines	ACAT, CbD, mini-CEX	1
Encourages discussion amongst colleagues on evidence-based practice	ACAT, CbD, mini-CEX, MSF	1
<b>Level Descriptor</b>		
<b>1</b>	Participates in departmental or other local journal club Critically reviews an article to identify the level of evidence and submits the same for objective review Understands the importance of evidence based practice; is aware of the different levels of evidence	
<b>2</b>	Leads in a departmental or other local journal club Undertakes a literature review in relation to a clinical problem or topic and presents the same Able to explain the evidence base of clinical care to patients and to other members of the clinical team	
<b>3</b>	Produces a review article on a clinical topic, having reviewed and appraised the relevant literature	
<b>4</b>	Performs a systematic review of the medical literature Contributes to the development of local or national clinical guidelines and protocol	



## Audit

**To develop the ability to perform an audit of clinical practice and to apply the findings appropriately and complete the audit cycle**

<b>Knowledge</b>		<b>Assessment Methods</b>	<b>GMP</b>
Understands the different methods of obtaining data for audit, including patient feedback questionnaires, hospital sources and national reference data		AA, CbD	1
Understands the role of audit (improving patient care and services, risk management etc)		AA, CbD	1
Understands the steps involved in completing the audit cycle		AA, CbD	1
Understands the working and uses of national and local databases used for audit, such as specialty data collection systems, cancer registries etc;		AA, CbD	1
Understands the working and uses of local and national systems available for reporting and learning from clinical incidents and near misses in the UK		AA	1
<b>Skills</b>			
Designs, implements and completes audit cycles		AA, CbD	1, 2
Contributes to local and national audit projects as appropriate (e.g. NCEPOD, SASM)		AA, CbD	1, 2
Supports audit by junior medical trainees and within the multi-disciplinary team		AA, CbD	1, 2
<b>Behaviours</b>			
Recognises the need for audit in clinical practice to promote standard setting and quality assurance		AA, CbD	1, 2
<b>Level Descriptor</b>			
<b>1</b>	Attendance at departmental audit meetings Contributes data to a local or national audit Suggests ideas for local audits		
<b>2</b>	Identifies a problem and develop standards for a local audit Describes the PDSA (plan, do, study, act) audit cycle and takes an audit through the first steps		
<b>3</b>	Compares the results of an audit with criteria and standards to reach conclusions Uses the findings of an audit to develop and implement change Organises or leads a departmental audit meeting Understands the links between audit and quality improvement		
<b>4</b>	Leads 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 Becomes audit lead for an institution or organisation		

## Teaching and Training

**To develop the ability to teach to a variety of different audiences in a variety of different ways**

**To be able to assess the quality of the teaching**

**To be able to train a variety of different trainees in a variety of different ways**

**To be able to plan and deliver a training programme with appropriate assessments**

Knowledge	Assessment Methods	GMP
Describes relevant educational theories and principles	CbD	1
Outlines adult learning principles relevant to medical education	CbD	1
Demonstrates knowledge of literature relevant to developments and challenges in medical education and other sectors	CbD	1
Outlines the structure of an effective appraisal interview	CbD	1
Defines the roles of the various bodies involved in medical education and other sectors	CbD,	1
Identification of learning methods and effective learning objectives and outcomes	CbD	1
Describes the difference between learning objectives and outcomes	CbD	1
Differentiates between appraisal and assessment and performance review and is aware of the need for both	CbD	1
Differentiates between formative and summative assessment and defines their role in medical education	CbD	1
Outlines the structure of the effective appraisal review	CbD	1
Outlines the role of workplace-based assessments, the assessment tools in use, their relationship to course learning outcomes, the factors that influence their selection and the need for monitoring evaluation	CbD	1
Outlines the appropriate local course of action to assist a trainee experiencing difficulty in making progress within their training programme	CbD	1
Skills		
Is able to critically evaluate relevant educational literature	CbD	1
Varies teaching format and stimulus, as appropriate to situation and subject	CbD, TO	1
Provides effective and appropriate feedback after teaching, and promotes learner reflection	CbD, MSF	1
Conducts developmental conversations as appropriate, for example, appraisal, supervision, mentoring	CbD, MSF	1
Demonstrates effective lecture, presentation, small group and bedside teaching sessions	CbD, MSF, TO	1, 3
Provides appropriate career support, or refers trainee to an alternative effective source of career information	CbD, MSF	1, 3
Participates in strategies aimed at improving patient education e.g. talking at support group meetings	CbD, MSF, TO	1
Is able to lead departmental teaching programmes, including journal clubs	CbD	1
Recognises the trainee in difficulty and takes appropriate action,	CbD, TO	1

including where relevant referral to other services		
Is able to identify and plan learning activities in the workplace	CbD	1
Contributes to educational research or projects e.g. through the development of research ideas of data/information gathering	CbD	1
Is able to manage personal time and resources effectively to the benefit of the educational faculty and the need of the learners	CbD	1
<b>Behaviour</b>		
In discharging educational duties acts to maintain the dignity and safety of patients at all times	CbD, MSF, TO	1, 4
Recognises the importance of the role of the physician as an educator within the multi-professional healthcare team and uses medical education to enhance the care of patients	CbD, MSF, TO	1
Balances the needs of service delivery with education	CbD, MSF, TO	1
Demonstrates willingness to teach trainees and other health and social workers in a variety of settings to maximise effective communication and practical skills and to improve patient care	CbD, MSF, TO	1
Demonstrates consideration for learners, including their emotional, physical and psychological wellbeing, along with their development needs; acts to ensure equality of opportunity for students, trainees, staff and professional colleagues	CbD, MSF, TO	1
Encourages discussions with colleagues in clinical settings to share knowledge and understanding	CbD, MSF, TO	1, 3
Maintains honesty and objectivity during appraisal and assessment	CbD, MSF, TO	1
Shows willingness to participate in workplace-based assessments and demonstrates a clear understanding of their purpose	CbD, MSF, TO	1
Shows willingness to take up formal training as a trainer and responds to feedback obtained after teaching sessions	CbD, MSF, TO	1, 3
Demonstrates a willingness to become involved in the wider medical education activities and fosters an enthusiasm for medical education activity in others	CbD, MSF, TO	1
Recognises the importance of personal development as a role model to guide trainees in aspects of good professional behaviour	CbD, MSF, TO	1
Demonstrates a willingness to advance own educational capability through continuous learning	CbD, MSF, TO	1
Acts to enhance and improve educational provision through evaluation of own practice	CbD, MSF, TO	1
Contributes to educational policy and development at local or national levels	CbD, MSF, TO	1
<b>Level Descriptor</b>		
<b>1</b>	Able to prepare appropriate materials to support teaching episodes Able to seek and interpret simple feedback following teaching	
<b>2</b>	Able to supervise a medical student, nurse or colleague through a procedure Able to perform a workplace based assessment including being able to give effective and appropriate feedback Delivers small group teaching to medical students, nurses or colleagues Able to teach clinical skills effectively	
<b>3</b>	Able to devise a variety of different assessments (e.g. multiple choice questions, work place	

	based assessments) Able to appraise a medical student, nurse or colleague Able to act as a mentor to a medical student, nurses or colleague
4	Able to plan, develop and deliver educational activities with clear objectives and outcomes Able to plan, develop and deliver an assessment programme to support educational activities

## Personal Behaviour

**To develop the behaviours that will enable the doctor to become a senior leader able to deal with complex situations and difficult behaviours and attitudes. To work increasingly effectively with many teams and to be known to put the quality and safety of patient care as a prime objective**  
**To develop the attributes of someone who is trusted to be able to manage complex human, legal and ethical problem. To become someone who is trusted and is known to act fairly in all situations**

Knowledge	Assessment Methods	GMP
Recalls and builds upon the competences defined in the Foundation Programme Curriculum: <ul style="list-style-type: none"> <li>• Deals with inappropriate patient and family behaviour</li> <li>• Respects the rights of children, elderly, people with physical, mental, learning or communication difficulties</li> <li>• Adopts an approach to eliminate discrimination against patients from diverse backgrounds including age, gender, race, culture, disability and sexuality</li> <li>• Places needs of patients above own convenience</li> <li>• Behaves with honesty and probity</li> <li>• Acts with honesty and sensitivity in a non-confrontational manner</li> <li>• Knows the main methods of ethical reasoning: casuistry, ontology and consequential</li> <li>• Understands the overall approach of value-based practice and how this relates to ethics, law and decision-making</li> </ul>	ACAT, CbD, mini-CEX, MSF, PS	1,2,3,4
Defines the concept of modern medical professionalism	CbD	1
Outlines the relevance of professional bodies (Royal Colleges, JRCPTB, GMC, Postgraduate Dean, BMA, specialist societies, medical defence societies)	CbD	1
Skills		
Practises with professionalism including: <ul style="list-style-type: none"> <li>• Integrity</li> <li>• Compassion</li> <li>• Altruism</li> <li>• Continuous improvement</li> <li>• Aspiration to excellence</li> </ul>	ACAT, CbD, mini-CEX, MSF, PS	1, 2, 3, 4

	<ul style="list-style-type: none"> <li>• Respect of cultural and ethnic diversity</li> <li>• Regard to the principles of equity</li> </ul>		
	Works in partnership with patients and members of the wider healthcare team	ACAT, CbD, mini-CEX, MSF	3
	Liaises with colleagues to plan and implement work rotas	ACAT, MSF	3
	Promotes awareness of the doctor's role in utilising healthcare resources optimally and within defined resource constraints	ACAT, CbD, mini-CEX, MSF	1, 3
	Recognises and responds appropriately to unprofessional behaviour in others	ACAT, CbD	1
	If appropriate and permitted, is able to provide specialist support to hospital and community-based services	ACAT, CbD, MSF	1
	Is able to handle enquiries from the press and other media effectively	CbD, DOPS	1, 3
<b>Behaviour</b>			
	Recognises personal beliefs and biases and understands their impact on the delivery of health services	ACAT, CbD, mini-CEX, MSF	1
	Where personal beliefs and biases impact upon professional practice, ensures appropriate referral of the patient	ACAT, CbD, mini-CEX, MSF	1
	Recognises the need to use all healthcare resources prudently and appropriately	ACAT, CbD, mini-CEX	1, 2
	Recognises the need to improve clinical leadership and management skill	ACAT, CbD, mini-CEX	1
	Recognises situations when it is appropriate to involve professional and regulatory bodies	ACAT, CbD, mini-CEX	1
	Shows willingness to act as a leader, mentor, educator and role model	ACAT, CbD, mini-CEX, MSF	1
	Is willing to accept mentoring as a positive contribution to promote personal professional development	ACAT, CbD, mini-CEX	1
	Participates in professional regulation and professional development	CbD, mini-CEX, MSF	1
	Takes part in 360 degree feedback as part of appraisal	CbD, MSF	1, 2, 4
	Recognises the right for equity of access to healthcare	ACAT, CbD, mini-CEX,	1
	Recognises need for reliability and accessibility throughout the healthcare team	ACAT, CbD, mini-CEX, MSF	1
<b>Level Descriptor</b>			
<b>1</b>	<p>Works work well within the context of multi-professional teams</p> <p>Listens well to others and takes other viewpoints into consideration</p> <p>Supports patients and relatives at times of difficulty e.g. after receiving difficult news</p> <p>Is polite and calm when called or asked to help</p>		
<b>2</b>	<p>Responds to criticism positively and seeks to understand its origins and works to improve</p> <p>Praises staff when they have done well and where there are failings in delivery of care provides constructive feedback</p> <p>Wherever possible, involves patients in decision making</p>		
<b>3</b>	<p>Recognises when other staff are under stress and not performing as expected and provides appropriate support for them.</p> <p>Takes action necessary to ensure that patient safety is not compromised</p>		

<b>4/5</b>	<p>Helps patients who show anger or aggression towards staff or with regards to their care or situation, and works with them to find an approach to manage their problem</p> <p>Is able to engender trust so that staff feel confident about sharing difficult problems and feel able to point out deficiencies in care at an early stage</p>
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## Management and NHS Structure

**To understand the structure of the NHS and the management of local healthcare systems in order to be able to participate fully in managing healthcare provision**

Knowledge	Assessment Methods	GMP
Understands the guidance given on management and doctors by the GMC	CbD	1
Understands the local structure of NHS systems in the locality, recognising the potential differences between the four countries of the UK	ACAT, CbD	1
Be familiar with the range of agencies that can provide care and support in and out of hospital, and how they can be accessed	CbD	1
Understand, the structure and function of healthcare systems as they apply to your specialty	ACAT, CbD	1
Understands the consistent debates and changes that occur in the NHS including the political, social, technical, economic, organisational and professional aspects that can impact on provision of service	CbD	1
Understands the importance of local demographic, socio-economic and health data and the use to improve system performance	CbD	1
Understands the principles of: <ul style="list-style-type: none"> <li>• Clinical coding</li> <li>• European Working Time Regulations including rest provisions</li> <li>• National Service Frameworks</li> <li>• Health regulatory agencies (e.g., NICE, Scottish Government)</li> <li>• NHS Structure and relationships</li> <li>• NHS finance and budgeting</li> <li>• Consultant contract and the contracting process</li> <li>• Resource allocation</li> <li>• The role of the Independent sector as providers of healthcare</li> <li>• Patient and public involvement processes and role</li> </ul>	ACAT, CbD, mini-CEX	1
Understands the principles of recruitment and appointment procedures	CbD	1
Skills		
Participates in managerial meetings	ACAT, CbD	1
Takes an active role in promoting the best use of healthcare resources	ACAT, CbD, mini-CEX	1

Works with stakeholders to create and sustain a patient-centred service	ACAT, CbD, mini-CEX	1
Employs new technologies appropriately, including information technology	ACAT, CbD, mini-CEX	1
Conducts an assessment of the community needs for specific health improvement measures	CbD, mini-CEX	1
<b>Behaviour</b>		
Recognises the importance of equitable allocation of healthcare resources and of commissioning	CbD	1, 2
Recognises the role of doctors as active participants in healthcare systems	ACAT, CbD, mini-CEX	1, 2
Responds appropriately to health service objectives and targets and take part in the development of services	ACAT, CbD, mini-CEX	1, 2
Recognises the role of patients and carers as active participants in healthcare systems and service planning	ACAT, CbD, mini-CEX, PS	1, 2, 3
Shows willingness to improve managerial skills (e.g. management courses) and engage in management of the service	CbD, MSF	1
<b>Level Descriptor</b>		
<b>1</b>	<p>Works as a valued member of the multi-professional team.</p> <p>Listens well to others and takes other viewpoints into consideration</p> <p>Supports patients and relatives at times of difficulty e.g. after receiving difficult news</p> <p>Is polite and calm when called or asked to help</p> <p>Acknowledges the skills of all members of the team</p>	
<b>2</b>	<p>Can describe in outline the roles of primary care, including general practice, public health, community, mental health, secondary and tertiary care services within healthcare</p> <p>Can describe the roles of members of the clinical team and the relationships between those roles</p> <p>Participates fully in clinical coding arrangements and other relevant local activities.</p>	
<b>3</b>	<p>Can describe the relationship between PCTs/Health Boards, General Practice and Trusts including relationships with local authorities and social services</p> <p>Participates in team and clinical directorate meetings including discussions around service development</p> <p>Discusses the most recent guidance from the relevant health regulatory agencies in relation to the specialty</p>	
<b>4</b>	<p>Describes the local structure for health services and how they relate to regional or devolved administration structures; is able to discuss funding allocation processes from central government in outline and how that might impact on the local health organisation</p> <p>Participates fully in clinical directorate meetings and other appropriate local management structures in planning and delivering healthcare within the specialty</p> <p>Participates as appropriate in staff recruitment processes in order to deliver an effective clinical team</p> <p>Within the Directorate, collaborates with other stake holders to ensure that their needs and views are considered in managing services</p>	

## Personal qualities of a Gastroenterologist

**To demonstrate the personal qualities of a gastroenterologist. The trainee will be required to draw upon their own values, strengths and abilities to deliver high standards of care.**

Knowledge	Assessment Methods	GMP
Demonstrate the knowledge of how patients with gastro intestinal liver disease are affected by their illness	CbD, mini-CEX	1
Demonstrate the knowledge of the effect of Gastro Intestinal liver disease on quality of life capacity, capacity for work, interpersonal relationships and indeed the general wellbeing of an individual.	CbD, mini-CEX	1
Demonstrate knowledge of tools and techniques for managing stress	CbD, mini-CEX	1
Skills		
Ability to advise people of desirable alterations to lifestyle in an effective but firm and empathic manner	CbD, mini-CEX	1,3
Ability to develop creative solutions to transform services and care	CbD, mini-CEX	1
Ability to undertake an audit project	CbD, mini-CEX, AA	1
Behaviours		
Display self awareness: being aware of their own values, principles, assumptions, and by being able to learn from experiences.	MSF, mini-CEX	3
Recognise when self or others are falling behind and take steps to rectify the situation.	MSF, CbD	1, 3
Recognise the importance of induction for new members of a team.	MSF, CbD	1, 3
Demonstrate self management: organising and managing themselves while taking account of the needs and priorities of others.	CbD, PS	3
Self development: learns through participating in continuing professional development and from experience and feedback.	MSF, mini-CEX	3
Act with integrity: behaving in an open and ethical manner.	MSF, PS	4

## Management of patients requiring Palliative and End of life Care

**To be able to work and liaise with a multi-disciplinary team in the management of patients requiring palliative and end of life care.**

**To be able to recognise the dying phase of a terminal illness, assess and care for a patient who is dying and be able to prepare the patient and family.**

**To be able to devise an appropriate management plan and facilitate advance care planning**

Knowledge	Assessment Methods	GMP Domains
Describe different disease trajectories and prognostic indicators and the signs that a patient is dying	ACAT, CbD, mini-CEX	1
Know that specialist palliative care is appropriate for patients with other life threatening illnesses as well as those with cancer	ACAT, CbD, mini-CEX	1,3
Describe the pharmacology of major drug classes used in palliative care, including opioids, NSAIDS, agents for neuropathic pain, bisphosphonates, laxatives, anxiolytics, and antiemetics. Describe common side effects of drugs commonly used	ACAT, CbD, mini-CEX	1
Describe the analgesic ladder, role of radiotherapy, surgery and other	ACAT, CbD,	1



non-pharmacological treatments	mini-CEX	
Describe advance care planning	CbD, mini-CEX	1
Knowledge of a spectrum of professional and complementary therapies available, e.g. palliative medicine, hospice and other community services, nutritional support, pain relief, psychology of dying.	CbD, mini-CEX	1,2
Know about End of Life Integrated Care Pathway documentation	ACAT, CbD, mini-CEX	1
Know about the use of syringe drivers	ACAT, CbD, mini-CEX	1
Outline spiritual care services & when to refer	CbD, mini-CEX	1
Describe the role of the coroner and when to refer to them	ACAT, CbD, mini-CEX	1
<b>Skills</b>		
Recognising when a patient may be in the last days / weeks of life	ACAT, CbD, mini-CEX	1
Be able to assess the patient's physical, and social needs	ACAT, CbD, mini-CEX	1
Is able to take an accurate pain history, recognising that patients may have multiple pains and causes of pain	ACAT, CbD, mini-CEX	1
Is able to prescribe opioids correctly and safely using appropriate routes of administration	ACAT, CbD, mini-CEX	1, 2
Able to assess response to analgesia and recognise medication side effects or toxicity	ACAT, CbD, mini-CEX	1, 2
Is able to assess and manage other symptom control problems including nausea and vomiting, constipation, breathlessness, excess respiratory tract secretions, agitation, anxiety and depression	ACAT, CbD, mini-CEX	1

## 2. Core Competencies for all Gastroenterologists

### a) Basic and Applied Science in Gastroenterology

#### Basic Science in Gastroenterology

##### Clinical Anatomy, Physiology and Biochemistry

To understand the relevance of basic science to clinical practice		
Knowledge	Assessment Methods	GMP
Understands the development, structure and function of the normal gastrointestinal tract and the liver	ESEGH	1
Is aware of how disease processes can disturb normal anatomical structure	CbD, ESEGH	1
Describes the contribution of disordered gastrointestinal motility both to patients' symptoms and to their diseases	CbD, mini- CEX, ESEGH	1,3
Is aware of how diseases result from alterations in gastric secretion, intestinal absorption and secretion, and disordered function of the liver and pancreas	CbD, ESEGH	1,2,3
Is aware of the normal micro-structure of the gut and liver and how they can be affected by disease processes	ESEGH	1
Knows those aspects of biochemistry relevant to normal gastrointestinal and liver function and understand how diseases may either result from or cause abnormal biochemical processes	ESEGH	1
Skills		
Shows recognition of the importance of a thorough grounding in basic science to gaining an understanding of gastrointestinal disease processes	ESEGH	1,2,4
Behaviours		
Adjusts explanations of all aspects of clinical gastroenterology according to patients' understanding	CbD, PS	1,2,3,4

## Applied science in Gastroenterology

### Applied Sciences 1: Clinical Genetics and Epidemiology

To understand the relevance of genetics and epidemiology to clinical practice		
Knowledge	Assessment Methods	GMP
Knows the basics of clinical genetics, including both 'classical' and molecular genetics	ESEGH	1
Understands the patterns of inheritance of gastrointestinal and liver diseases.	ESEGH	1
Aware of the developing understanding of how genetic factors may be important in a growing number of diseases	ESEGH	1
Understands how techniques of molecular biology can explain predisposition to disease	ESEGH	1
Aware of the epidemiological factors that contribute to developing gastrointestinal and liver diseases and of the scientific methods used to determine disease associations	ESEGH	1
Describes genetic and environmental causes for disease	ESEGH	1
Skills		
Is able to identify genetic and environmental factors underlying disease in individual patients and to advise them accordingly	mini-CEX, PS, ESEGH	1,4
Behaviour		
Seeks advice from appropriate specialists, including referral for genetic counselling where appropriate	CbD, ESEGH	1,2,3,4

### Applied Sciences 2: Pathology and Radiology

To understand the importance of pathology and radiology		
Knowledge	Assessment Methods	GMP
Pathology: Knows the basic pathological changes that occur in gastrointestinal and liver diseases Understands and can utilise the significance of the information that clinical pathologists are able to provide	ESEGH	1,2
Radiology: Knows how the range of potential diagnostic imaging techniques can aid patient management Is able to select the most appropriate imaging techniques to aid management in specific clinical situations, Is aware of the potential of radiologically-guided interventions	ESEGH	1,2,3
Describes the relevant contributions of different specialists to diagnosis and management	ESEGH	1
Skills		
Can choose the appropriate investigations in specific clinical situations	CbD, DOPS, ESEGH	1,2,3

Interprets the results of pathological and radiological investigations	CbD, DOPS, ESEGH	1,2,3
<b>Behaviours</b>		
Liaises with specialists in other disciplines in selecting the most appropriate investigations.	CbD	1,2,3

### Applied Sciences 3: Immunology and Microbiology

To understand the relevance of immunology and microbiology		
Knowledge	Assessment Methods	GMP
Immunology: Knows the role of the immune system in mucosal defence mechanisms in the gastrointestinal tract	ESEGH	1
Is aware of the role and consequences of disordered immunity in both gastrointestinal and liver diseases	ESEGH	1
Understands the role of medical treatment in modifying immune responses	ESEGH	1,2
Microbiology: Recognises the huge importance of infection as a cause of gastrointestinal and liver disease and the different range of infections around the world.	ESEGH	1,2
Knows the clinical presentations of such infections, their diagnosis and appropriate treatments	CbD, mini-CEX, ESEGH	1,3,4
Appreciates the importance of infection in the pathogenesis of complications of liver disease, such as variceal bleeding, hepatorenal failure and spontaneous bacterial peritonitis and role of prophylactic antibiotics	CbD, mini-CEX, ESEGH	1
<b>Skills</b>		
Considers disordered immunity or infection as a cause of a patient's disease	ACAT, CbD, mini-CEX, ESEGH	1,2,3,4
Uses laboratory investigations appropriately	ACAT, CbD, mini-CEX, ESEGH	1,2,3,4
Uses antibiotics and immunomodulatory drugs appropriately	ACAT, CbD, mini-CEX, ESEGH	1,2,3,4
<b>Behaviours</b>		
Can assess and manage patients presenting with a wide range of conditions to which infection and disordered immunity contribute	CbD, mini-CEX	1,3

## Applied Sciences 4: Oncology

### To understand the principles of oncology.

Knowledge	Assessment Methods	GMP
Understands the essentials of the biology of tumours of the gastrointestinal tract and the liver	ESEGH	1
Knows those conditions which are potentially pre- malignant	ESEGH	1
Understands the principles of screening and surveillance	ESEGH	1,2
Is aware of the ways in which tumours present clinically and the means by which they can be diagnosed and staged	mini-CEX, ESEGH	1,3
Understands the range of treatment options, their effectiveness and their possible complications	mini-CEX, ESEGH	1,2,3
Knows the principles of palliative care	CbD, PS	1,3,4
Aware of the modern interdisciplinary management of gastrointestinal cancers. The gastroenterologist acting with radiologists, pathologists, oncologists, surgeons, palliative care specialists and clinical nurse as well as interacting with primary care practitioners	CbD	1,3,4
Skills		
Be able to make a timely and accurate clinical assessment of patients with malignant disease, select appropriate investigations and refer to the specialist multi-disciplinary team	ACAT, CbD, mini-CEX, ESEGH	1,2,3,4
Demonstrates awareness of how different members of the team communicate and respect, value and acknowledge the roles, contributions and expertise of others	CbD, MSF	1,3
Identify and prioritise tasks and responsibilities including to delegate and supervise safely	CbD, MSF	1,2,3
Behaviours		
Makes a prompt diagnosis and plan of management	mini-CEX ,PS, MSF	1,3,4
Shows empathy when breaking bad news. Uses a holistic approach to patient management.	mini-CEX, MSF	3,4
Works effectively within the multidisciplinary team	MSF	3

## b) Upper Gastrointestinal Tract Disorders

### Oesophageal Symptoms

#### Gastro-Oesophageal Reflux

To understand the mechanisms of reflux and its clinical management.		
Knowledge	Assessment Methods	GMP
Recognises the typical clinical presentations of gastro-oesophageal reflux	CbD, mini-CEX, ESEGH	1
Is aware of the relationships of reflux to pharyngeal, laryngeal and respiratory symptoms	CbD, mini-CEX, ESEGH	1
Knows the range of diagnostic tests	CbD, DOPS, ESEGH	1,2
Knows the role of endoscopy and radiology	CbD, DOPS, ESEGH	1,2
Understands the role of physiological investigation including ambulatory pH monitoring	CbD, DOPS, ESEGH	1,2
Understands the complications of reflux disease	CbD, mini-CEX, ESEGH	1
Recognises the importance of the development of columnar-lined mucosa; follow-up of such patients and the role of surveillance	DOPS, ESEGH	1,2
Knows the treatment options, both medical and surgical	CbD, mini-CEX, ESEGH	1
Skills		
Can make a clinical assessment, select appropriate investigations and devise a plan for treatment and follow-up	CbD, mini-CEX	1,4
Behaviours		
Explains the condition to the patient and discuss the options for management with sensitivity and in an understandable manner	mini-CEX	1,3,4

#### Dysphagia and Non Cardiac Chest Pain

To understand the causes of non-cardiac chest pain and dysphagia, and how patients are managed.		
Knowledge	Assessment Methods	GMP
Dysphagia:		
Knows the various causes of dysphagia and their clinical presentations	CbD, ESEGH	1
Understands the methods of assessment and investigation including the use of manometric assessment where appropriate	CbD, mini-CEX, ESEGH	1
Knows the range of therapeutic options including the potential for endoscopic treatment, and how to select appropriate treatment	CbD, mini-CEX, ESEGH	1,2,3
Non-Cardiac Chest Pain:		
Understands the potential role of the oesophagus in patients presenting with chest pain in whom a cardiac cause has been excluded and its role in the genesis of functional symptoms.	CbD, ESEGH	1

Knows the range of appropriate investigation of such patients and the various avenues of management	CbD, mini-CEX, ESEGH	1,3
<b>Carcinoma of the Oesophagus:</b>		
Knows the predisposing factors, presentation, diagnostic work-up and staging	CbD, mini-CEX, ESEGH	1,2,3,4
Knows the range of potential therapies (including palliative care), and understand how the appropriate selection is made	CbD, mini-CEX, ESEGH	1,2,3,4
<b>Skills</b>		
Can make a thorough clinical assessment, select investigations appropriately and plan therapy.	CbD, mini-CEX, ESEGH	1,2
<b>Behaviours</b>		
Manages patients with oesophageal disease with care and compassion.	mini-CEX	1,3,4

## Gastro-Duodenal Diseases

### Dyspepsia and Peptic Ulcer

<b>Understand the clinical management of patients with ulcer and non-ulcer dyspepsia</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Dyspepsia and Peptic Ulcer:		
Knows the range of organic and non-organic causes of dyspepsia. Be aware of current BSG and NICE guidelines for selecting patients for investigation. Know the significance of alarm symptoms	CbD, mini-CEX, ESEGH	1
Understands the relevance of Helicobacter pylori infection and how it can be detected and treated. Recognise the adverse effect of non-steroidal anti-inflammatory drugs	CbD, ESEGH	1
Understands the physiology of gastric acid secretion, mucosal protection and gastroduodenal motility and know how drugs can modify these	ESEGH	1
Knows the complications of ulcer disease, the principles of surgery that may be required and be aware of post-operative sequelae	CbD, ESEGH	1,2
<b>Skills</b>		
Makes a thorough clinical assessment, perform appropriate investigations and be familiar with how medical treatments are used.	CbD, mini-CEX, ESEGH	1,2,4
Show awareness of how to recognise and manage complications	CbD, mini-CEX, ESEGH	1,2,4
<b>Behaviours</b>		
Can explain the steps taken towards making a diagnosis and planning treatment clearly and comprehensibly	mini-CEX	1,3

### Upper Gastrointestinal Bleeding

<b>Understand the presentation and management of patients presenting with haematemesis and/or melaena</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the causes of upper gastrointestinal bleeding and its presentation	CbD, mini-CEX, ESEGH	1
Understands the circulatory disturbance associated with blood loss and the pathophysiology underlying the clinical manifestations of hypovolaemic shock	CbD, ESEGH	1
Knows the principles of assessing hypovolaemia and of restoring the circulation. Be able to identify and correct coagulopathy	CbD, ESEGH	1
Knows the principles of using the various risk stratification tools	ESEGH	1
Knows how endoscopic techniques are used to control bleeding	CbD, DOPS, ESEGH	1
Understands how oesophageal and gastric varices develop and the endoscopic and pharmacological methods that are used to control blood loss	CbD, ESEGH	1
<b>Skills</b>		
Can make an accurate clinical assessment, and stratify the risk. Know	ACAT, DOPS,	1,2,3



the principles of fluid resuscitation and arrange endoscopy	ESEGH	
Is aware of methods to secure haemostasis, recognise signs of re-bleeding and liaise with other disciplines (such as interventional radiology or surgery)	ACAT, DOPS, ESEGH	1,2,3
<b>Behaviours</b>		
Assesses and treats patients who have bleeding with appropriate degree of urgency.	CbD, DOPS, MSF	1,2,3,4

## Significant Upper Gastrointestinal Symptoms

**Understand the range of symptoms arising from the upper GI tract and how patients with these are managed.**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
<b>Nausea and Vomiting:</b>		
Understands the pathophysiology of vomiting	CbD, mini-CEX, ESEGH	1
Appreciates the gastrointestinal conditions that cause nausea and vomiting as well as the range of extra-intestinal causes	CbD, mini-CEX, ESEGH	1
Recognises the influence of neurological conditions and metabolic derangements such as diabetes	CbD, mini-CEX, ESEGH	1
Understands the physiology of gastric emptying and how this is affected by disease, toxins and drugs	ESEGH	1
<b>Abdominal Pain:</b>		
Knows the causes of acute and chronic abdominal pain that arise from upper gastrointestinal, biliary and pancreatic diseases	ACAT, CbD, mini-CEX, ESEGH	
Understands the clinical presentations of the various conditions causing pain and the means by which they can be diagnosed and treated	ACAT, CbD, mini-CEX, ESEGH	
<b>Weight Loss:</b>		
Knows the significance of weight loss as a consequence of upper gastrointestinal disease, knows those conditions that present with loss of weight and how they are managed	CbD, mini-CEX, ESEGH	1
<b>Skills</b>		
Makes a detailed clinical assessment of patients presenting with symptoms indicating possible upper gastrointestinal disease, construct a management plan and be aware of the various avenues of treatment	ACAT, CbD	1
<b>Behaviours</b>		
Evaluates patients in a structured and timely manner, carries out appropriate investigations and formulates management plan.	CbD, PS	3,4

## c) Intestinal Disorders

### Abdominal Pain

**Understands the causes of acute and chronic abdominal pain and how patients with these symptoms are managed.**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the causes of acute and chronic abdominal pain originating both from the gastrointestinal tract and elsewhere	CbD, mini-CEX, ESEGH	1
Understands the mechanisms by which pain is produced in the various conditions and the underlying basis of pain perception	ESEGH	1
Knows the methods of clinical assessment and the means of investigation	CbD, mini-CEX, ESEGH	1
Understands the range of treatment options for managing acute and chronic pain – both pharmacological and otherwise, and knows the safe use of appropriate analgesics	CbD, ESEGH	1
Knows how psychological factors can modify a patient's response to pain	CbD, mini-CEX	1,3
<b>Skills</b>		
Can take a thorough history and elicit physical signs in patients with abdominal pain	CbD, mini-CEX, ESEGH	1
Can plan investigations appropriately, reach a diagnosis and formulate a plan of management	CbD, mini-CEX, ESEGH	1
<b>Behaviours</b>		
Shows understanding of the patient's anxiety and responds sympathetically. Appreciates the need for pain control	mini-CEX, MSF	1,3,4
Relates effectively with specialists in other disciplines when appropriate	mini-CEX, MSF	1,3,4
Shows compassion in managing patients with chronic pain especially when response to treatment has been disappointing	mini-CEX, MSF	1,3,4

### Diarrhoea

**Understands the causes of acute and chronic diarrhoea and their management.**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the physiology of intestinal absorption, secretion and motility	ESEGH	1
Understands the biochemical processes occurring within the gut lumen and at mucosal level	ESEGH	1
Has awareness of the factors controlling these processes – in particular the neuro-endocrine influences	ESEGH	1
Understands the range of mechanisms by which diarrhoea can result from disturbances in each of these processes	ESEGH	1
Knows the causes of both acute and chronic diarrhoea	mini-CEX, ESEGH	1
Knows the range of investigations appropriate to determining the cause of the patient's diarrhoea and is aware of the range of therapeutic possibilities	CbD, mini-CEX, ESEGH	1,3

<b>Skills</b>		
Makes a detailed clinical assessment of patients that present with either acute or chronic diarrhoea	CbD, mini-CEX, ESEGH	1,2,3
Recognises the potential need for urgent fluid replacement	CbD, mini-CEX, ESEGH	1,2,3
Makes appropriate use of microbiology and other relevant laboratories in reaching a diagnosis	CbD, mini-CEX, ESEGH	1,2,3
Shows ability to interpret results, reach a diagnosis and formulate a treatment plan	CbD, mini-CEX, ESEGH	1,2,3
<b>Behaviours</b>		
Reacts appropriately to the urgency of the clinical presentation	CbD, MSF, PS	1,2,3,4
Always shows sympathy and understanding especially when the patient is distressed	CbD, MSF, PS	1,2,3,4

## Functional Gut Disorders: Irritable Bowel Syndrome

<b>Understands functional gut disorders and the approach to their treatment.</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Shows understanding of contemporary knowledge of the range of factors that control gastrointestinal motility, as well as the means by which symptoms arising from the GI tract are perceived.	CbD, mini-CEX, ESEGH	1
In particular, can describe the enteric nervous system and understands the ways in which drugs can modify its functioning	ESEGH	1
Can describe the brain-gut axis and the role of psychological factors in the genesis of symptoms	ESEGH	1
Can describe the symptomatology and range of clinical presentations of patients with irritable bowel syndrome	CbD, mini-CEX, ESEGH	1
Knows the diagnostic criteria	CbD, mini-CEX, ESEGH	1
Realises the importance of careful clinical assessment as well as the need for appropriate selection of investigations	CbD, mini-CEX, ESEGH	1
Knows the evidence-based treatment options for IBS and the importance of a holistic and individualised approach to patient management	mini-CEX, ESEGH	1,3,4
<b>Skills</b>		
Can make an accurate clinical assessment of patients with irritable bowel syndrome	CbD, mini-CEX, ESEGH	1,3,4
Uses investigations selectively	CbD, mini-CEX, ESEGH	1,3,4
Communicates the diagnosis clearly and sympathetically	CbD, mini-CEX, ESEGH	1,3,4
Appreciates the degree to which functional gut problems can impair quality of life. Involves patients in making choice of treatment options	CbD, mini-CEX, ESEGH	1,3,4
Can explain, where appropriate, that a psychological treatment might be helpful and refer appropriately	CbD, mini-CEX, ESEGH	1,3,4
<b>Behaviours</b>		

Show a sympathetic understanding of the relevance of symptoms to the individual and never appears dismissive	mini-CEX	1,4
Takes time to explain nature of the condition, the treatment options and appreciates their (often) limited effectiveness	mini-CEX	1,4

## Functional Gut Disorders: Constipation and Disordered Defaecation

Understands functional gut disorders and the approach to their treatment		
Knowledge	Assessment Methods	GMP
Knows the functional anatomy and physiology of normal colon, rectum and anus	ESEGH	1
Can describe the causes of constipation. Distinguishes disordered gut transit from abnormalities of the process of defaecation	CbD, mini-CEX, ESEGH	1,2
Understands how abnormal transit and disordered anorectal anatomy and physiology may be investigated – including radiology and anorectal manometry	ESEGH, mini-CEX, CbD	1,2
Knows the mechanisms of continence and how these may be affected by disease	mini-CEX, ESEGH	1
Recognises syndromes of disordered defaecation including spurious diarrhoea, obstructed defaecation, Hirschsprung's disease	mini-CEX, ESEGH	1
Knows the range of treatment options including drugs, biofeedback and the possible role of surgery	CbD, mini-CEX, ESEGH	1,3
Skills		
Shows ability to carry out a detailed clinical assessment, can select investigations appropriately and advise the patient on options for treatment	CbD, mini-CEX, ESEGH	1
Understands how to use laxatives judiciously	CbD, mini-CEX, ESEGH	1
Behaviours		
Always uses a sympathetic and professional approach to the patient and takes appropriate steps to minimise embarrassment	MSF, PS	1,4
Explains nature of problem and outlines options for investigation and treatment	MSF, PS	1,4

## Inflammatory and Infective Conditions

Understands the presentation and management of infective and inflammatory disorders.		
Knowledge	Assessment Methods	GMP
Recognises the range of important inflammatory conditions of the intestine other than inflammatory bowel disease	ESEGH	1
Knows the range of potential aetiologies including infection and ischaemia	mini-CEX, ESEGH	1
Understands how diverticular disease can give rise to complications	mini-CEX, ESEGH	1
Knows how diseases can affect the peritoneum and how such conditions can present both in the acute and chronic situation	mini-CEX, ESEGH	1
Knows the range of both acute and chronic intestinal infections and	mini-CEX, ESEGH	1

their various presentations		
Knows the means of investigations of infectious diseases and understands the principles and use of antimicrobial therapy	CbD, mini-CEX, ESEGH	1
<b>Skills</b>		
Makes a full clinical assessment of patients presenting with infective and inflammatory conditions	CbD, mini-CEX, ESEGH	1,2,4
Recognises the potential urgency of the clinical situation. Selects appropriate investigations and treatments	CbD, mini-CEX, ESEGH	1,2,4
<b>Behaviours</b>		
Manages patients with inflammatory and infective conditions carefully, competently and sympathetically.	mini-CEX, MSF, PS	1,2,4

## Large Intestinal Tumours

<b>To recognise the presentation of colorectal tumours, how they are diagnosed and managed.</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the pathology of benign and malignant tumours of the colon and rectum	ESEGH	1
Has awareness of the molecular genetics of colorectal carcinogenesis and the adenoma-carcinoma sequence	ESEGH	1
Knows the range of predisposing conditions including inherited syndromes and acquired colonic diseases	ESEGH	1
Knows the range of clinical presentation and the means of diagnosis, investigation, management and follow-up	CbD, mini-CEX, ESEGH	1
Knows the strategy for prevention including procedures for screening	CbD, ESEGH	1
<b>Skills</b>		
Uses clinical assessment and selects investigations to reach a rapid conclusion as to whether a patient might have colorectal cancer and arranges timely investigation.	CbD, mini-CEX, MSF, ESEGH	1,3
Refers the patient to the multi-disciplinary team	CbD, mini-CEX, MSF, ESEGH	1,3
<b>Behaviours</b>		
Shows ability to react to possible diagnosis of malignancy in a timely manner	mini-CEX, MSF, PS	2,3,4
Communicates with patient and family in a sympathetic and understanding manner, explains next steps, involves other health professionals (including the GP) as appropriate	mini-CEX, MSF, PS	2,3,4

## Rectal Bleeding and Perianal Conditions

<b>Know the causes of rectal bleeding and their management.</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Understands the clinical anatomy of the rectum and anus	ESEGH	1
Knows the causes of rectal bleeding and the methods of investigation to determine the cause	ESEGH	1
Has awareness of the range of perianal conditions (which includes abscesses and fistula), their clinical presentation and their complications	CbD, mini-CEX, ESEGH	1
Knows the techniques of investigation and the possible medical and surgical treatments	CbD, ESEGH	1
Is aware of the treatment options for radiation proctitis	CbD, ESEGH	1
<b>Skills</b>		
Take a history and appropriately examines the anus and rectum	CbD, mini-CEX	1,3
Refers the patient for the appropriate endoscopic and radiological investigations	CbD, mini-CEX	1,3
<b>Behaviours</b>		
Manages patients with anorectal disease in a sympathetic manner, recognising and addressing the concerns caused by such conditions	mini-CEX, MSF, PS	2,3,4

## Inflammatory Bowel Disease

### Diagnosis and Investigation

**To recognise and understand the differential diagnosis of inflammatory bowel disease, and the investigations required to investigate and diagnose it.**

Knowledge	Assessment Methods	GMP
Knows the differential diagnosis of IBD including bacterial and amoebic infection, CMV, IBS, drug induced injury (NSAIDs) microscopic colitis and vasculitis.	ESEGH	1
Skills		
Uses appropriate investigations including blood tests, stool cultures and intestinal imaging modalities.	CbD, mini-CEX, ESEGH	1
Behaviours		
Exhibits sympathy to patient, orders appropriate tests in a timely manner, and involves members of the multidisciplinary team including IBD nurse and surgeon as appropriate.	CbD, MSF, PS	1,3,4

### Treatment

**To understand the treatment options available for IBD especially in the acute situation, and to recognise the importance of involving the patient and appropriate healthcare professionals and in decision making.**

Knowledge	Assessment Methods	GMP
Knows the criteria for assessing the severity and extent of IBD, in particular recognition of acute severe colitis. Knows treatment options including aminosalicylates, corticosteroids, and steroid sparing therapies.	CbD, mini-CEX, ESEGH	1
Knows differing methods of delivery for therapy.	CbD, mini-CEX, ESEGH	1
Skills		
Selects of appropriate treatment for extent and severity of disease, including timing of immunomodulator therapy and referral for surgery.	CbD, mini-CEX, ESEGH	1
Behaviours		
Recognises the urgency of treating acutely sick patients, including multidisciplinary team early, particularly surgeons. Clearly explains the clinical situation and treatment options to patient and family. Involves patient and family in decision making about treatment options.	mini-CEX, MSF, PS	1,2,3,4

## Complications and Special Situations

<b>To recognise long term complications of IBD, and their treatment including medical and surgical treatment.</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the complications of IBD including stricturing, fistulae, extraintestinal manifestations, colon cancer and special situations such as pregnancy.	CbD, mini-CEX, ESEGH	1
<b>Skills</b>		
Able to recognise potential complications and take appropriate action to investigate and alter treatment as necessary including referral for surgery and involvement of other healthcare professionals	CbD, mini-CEX, ESEGH	1,3
<b>Behaviours</b>		
Works with patient to explain complications and options for treatment	mini-CEX, MSF, PS	1,2,3,4
Involves the multidisciplinary team especially IBD nurse and surgeon in management, and tailors treatment to the needs of the patient. Discusses with colleagues early and appropriately	mini-CEX, MSF, PS	1,2,3,4



## d) Nutrition

During this module, which will typically take place over a 3-6 month period in an accredited unit, specialty registrars will have the opportunity to develop training and expertise in the core principles of nutritional support and management of intestinal failure.

### Accredited core nutrition training centres should have as a minimum:

- At least one consultant with an interest in nutrition;
- A nutrition steering committee, with senior multi-professional representation, which meets regularly;
- A multi-professional nutrition support team, which meets at least weekly and which should include a doctor, dietician, nurse and pharmacist.

During this module, trainees should become an integral member of the nutrition support team and fulfil the following roles:

- Attend weekly nutrition ward rounds
- Review patients between ward rounds and provide clinical input at ward rounds
- Assess patients for consideration of gastrostomy placement
- Assess patients for consideration of parenteral nutrition (PN)

Trainees will be expected to maintain a portfolio, which should contain the following and be included for review at their ARCP:

- Evidence of WBAs as detailed in ARCP decision grid
- At least nine reflective ward round patient lists
- Report from supervising consultant

### Nutritional Screening and Assessment

To be able to detect under and over nutrition and manage appropriately		
Knowledge	Assessment Methods	GMP
Describes the body composition, energy homeostasis, requirements and sources of macro and micronutrients and consequences of deficiency or excess	ESEGH	1
Outlines the different methods available to assess nutritional status	ESEGH	1
Skills		
Is able to use and interpret a valid nutrition screening tool (e.g. MUST)	mini-CEX	1
Can assess the nutritional status of individual patients using appropriate methodology	mini-CEX	1
Behaviours		
Liaises appropriately with other members of a nutrition support team	mini-CEX	1,2,3

## Weight loss and Anorexia

<b>To be able to identify, explain and manage patients with significant weight loss and/or anorexia</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Describes the GI and non-GI causes of weight loss and clinical consequences of undernutrition	ESEGH	1
Lists the features suggestive of an eating disorder	ESEGH	1
Outlines the risks of feeding someone with significant weight loss secondary to poor nutritional intake and how to minimise such risks	ESEGH	1
<b>Skills</b>		
Can take a relevant history and perform an appropriate examination in order to be able to identify the likely cause for anorexia/weight loss (including psychiatric conditions).	mini-CEX	1
Arranges relevant investigations, interprets results and organises appropriate management plan	CbD	1
<b>Behaviours</b>		
Explains and discusses potential causes with patient, especially those with non-organic conditions	mini-CEX	1,3

## Obesity

<b>To be aware of the health consequences and different management strategies for obesity and to be able to identify and manage the complications of such treatments</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Describes the risks associated with obesity	ESEGH	1
Describes interactions in the community which may help in the prevention/early intervention in populations at risk of obesity	CbD	1
Describes the dietary, pharmacological and surgical techniques (including anatomical re-configuration) for managing obesity and their associated medical and nutritional complications	ESEGH	1
<b>Skills</b>		
Takes a relevant history and perform an appropriate examination in order to be able to define level of obesity, identify potential complications and arrange relevant investigations before referral to an obesity service	CbD, mini-CEX	1
Able to interact with community services to help co-ordinate services/provide support	CbD	1
Investigates and appropriately manages (in conjunction with surgical and dietetic colleagues) patients admitted with complications from bariatric surgery	CbD	1,3
<b>Behaviours</b>		
Recognises obesity as an illness and will evaluate and treat the patient in a sympathetic manner	PS	1,2

## Malabsorption and Anaemia

**To understand the pathology, and clinical features of malabsorption and anaemia and how to investigate and manage it**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Defines the pathophysiology of fluid and nutrient malabsorption, including causes, e.g. anatomical and functional short bowel syndrome, high output stomas, enterocutaneous fistulae and pancreatic insufficiency	ESEGH	1
Knows how to investigate patients with malabsorption	ESEGH	1
Describes the clinical consequences of malabsorption, including malnutrition, fluid and electrolyte disturbance and micronutrient deficiency and anaemia and how to manage these	CbD, ESEGH	1
Describes all other causes of anaemia, including bone marrow disorders and haemolysis	ESEGH	1
Describes the metabolism, absorption and bioavailability of iron, B12 and folate and clinical conditions and diets associated with their deficiency	ESEGH	1
<b>Skills</b>		
Identifies and appropriately investigates clinical features suggestive of malabsorption	CbD, ESEGH	1
Manages fluid, electrolyte and micronutrient disturbances associated with short bowel syndrome or high output stomas	CbD, ESEGH	1
Uses the appropriate investigations for the different types of anaemia	ESEGH	1
<b>Behaviours</b>		
Takes a careful clinical approach to managing patients with malabsorption and anaemia. Explains plan of management clearly to patients and their relatives.	CbD, mini-CEX	1,3

## Artificial Nutritional Support

**To be able to identify and assess patients requiring artificial nutrition support and offer the appropriate route and monitoring of nutrition support.**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the appropriate indications and contraindications for the use of enteral and parenteral nutrition.	CbD, ESEGH	1
Outlines the different types of enteral and parenteral feeding lines and indications for use of each	ESEGH	1,3
Describes the principles of perioperative nutritional and fluid management	ESEGH	1
Lists the risks and complications of all types of artificial nutrition support and describe how to minimise these.	CbD, ESEGH	1,2,3
Describes the re-feeding syndrome and associated risks and management	CbD, ESEGH	1,2,3
Describes the role of different members of the nutrition support team (NST)	CbD	1,2,3
Outlines the ethical and legal implications of provision, withdrawal and withholding artificial nutrition support	CbD, ESEGH	1,2,3

<b>Skills</b>		
Chooses an appropriate bedside, endoscopic or radiological method and route for nutritional support, including different parenteral lines and gastric vs. post-pyloric tube placement options.	ESEGH	1
Demonstrates competence in insertion of a naso-jejunal tube and verification of position	DOPs	1
Supervises the use and management of feeding lines and prescribe appropriate intravenous and enteral feeding regimes in conjunction with dietetic, nursing and pharmacy colleagues in the NST	mini-CEX, MSF	1,3
Monitors patients on artificial nutrition support to avoid the re-feeding syndrome.	CbD, ESEGH	1
Understands the principles of perioperative nutritional and fluid management	CbD, ESEGH	1
Determines patient capacity and make appropriate decisions for artificial nutritional support	CbD	1,3
<b>Behaviours</b>		
Assesses the different options for nutritional support, explains and then discusses these with the patient and/ or carers/patient advocate, as appropriate	PS	1,2,3

### **Percutaneous Endoscopic Gastrostomy (PEG)**

**To understand the role of PEG in enteral feeding and be able to competently assess patients in terms of appropriateness and risks for procedure, as well as being able to insert a PEG tube safely and supervise follow up care**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Describes the ethical framework and indications for PEG tube insertion	CbD, ESEGH	1,2
Describes the anatomy of relevant area	ESEGH	1
Identifies different types of gastrostomy tube.	mini-CEX	1
Outlines the advantages, disadvantages and complications of PEG tube insertion	CbD, ESEGH	1
<b>Skills</b>		
Identifies and uses appropriately all components of a PEG insertion kit	DOPs	1
Can competently and safely perform insertion of a PEG tube (including jejunal extension where appropriate), both as an endoscopist and assistant.	DOPs	1
Can assess a patient after a PEG procedure and recognise and manage potential complications	CbD, mini-CEX	1
<b>Behaviours</b>		
Considers PEG support in appropriate cases, listen to patient's and/or relative's fears and expectations and discusses these sympathetically	CbD, PS	2,3,4

## e) Hepatology

There is widespread recognition of the increasing burden of liver disease and its complexity. Cirrhosis is now the fifth most common cause of death in the United Kingdom, and the only one that is on the increase. The current Health Service has not been formally organised to deliver a comprehensive hepatology service and consequently training strategies to date have been fragmented. This situation is evolving and it is anticipated that future organisation of liver services (see National Liver plan 2009) will allow the development of better integration of training opportunities in hepatology.

There is currently a variety of models of service and training in hepatology prevailing in the UK. Within this three levels of activity can be recognised:

1. Gastroenterologists and some hepatologists who work predominantly in district general hospitals who manage a significant number of patients with abnormal liver enzymes, jaundice and sometimes more complex liver disease but who rely on a regional centre for advice, support and referral pathways (e.g. for viral therapy, complex procedures such as transjugular liver biopsy or TIPS, and liver cancer management). For the purposes of training, these could be classified as level 1 centres.
2. Gastroenterologists and some hepatologists in larger centres, often university hospitals, who provide comprehensive specialist hepatology services which would include dedicated referral clinics and pathways, services for treatment of viral hepatitis, work up and shared care arrangements for liver transplantation, and 24 hour services for emergency management of variceal bleeding including specialised endoscopic and radiological interventions. Some of these centres will be themselves hepatobiliary and pancreatic (HPB) cancer centres or are affiliated to such centres with surgical and interventional radiology expertise in liver and biliary disorders. In such centres, trainees should have access to HPB multi-disciplinary meetings with an appropriate level of support in radiology and pathology services. For training purposes, these could be termed level 2 centres.
3. Hepatologists in liver transplant centres where there would be expected to be a comprehensive range of hepatology services including liver transplantation and liver-specific or liver-associated intensive care facilities. These are the level 3 centres.

In the course of their training it is anticipated that all gastroenterology trainees would gain more than six months experience in level 1 centres (and most will spend 12 months) but in order to attain the CCT, all trainees must spend at least six months in a level 2 or level 3 centre in order to deliver the appropriate concentration of patients and liver services pertinent to that training.

For advanced training towards sub-specialist certification in hepatology, trainees are required to spend a further 12 continuous months in one of the posts specifically approved to offer this module, and during their training at least three months should be in a level 3 centre described above.

## Basic Principles

### Basic Anatomy, Micro-Anatomy in Liver Physiology

To understand the pathophysiology of liver disease and hepatocellular dysfunction		
Knowledge	Assessment Methods	GMP
Understands the micro-anatomy and physiology of the liver and relates these to disease process and cellular function	ESEGH	1
Skills		
Recognises the spectrum of presentations and is aware of the broad range of disease processes affecting the liver.	mini-CEX, ESEGH	1
Behaviours		
Recognises the importance of a grounding in basic science in order to practise clinical hepatology.	CbD, ESEGH	1

### Clinical Evaluation and Investigation of Liver Disease

To understand the range of symptoms and risk factors for liver disease and its investigation		
Knowledge	Assessment Methods	GMP
Knows the symptoms experienced by patients who have both acute and chronic liver disease. Recognises the relevant physical signs. Knows the patterns of abnormality of blood tests, imaging and clinical pathology	CbD, mini-CEX, ESEGH	1,3
Skills		
Evaluates investigations and able to recognise the entire range of liver disease processes	mini-CEX, ESEGH	1
Behaviours		
Shows careful stepwise approach to the prompt and efficient clinical evaluation of patients with liver disease	mini-CEX, MSF	1

### Jaundice

To understand jaundice, how it is classified, investigated and severity measured		
Knowledge	Assessment Methods	GMP
Understands the mechanisms of biliary metabolism, the various abnormalities that lead to hyperbilirubinaemia and knows and recognises the causes of the various forms of jaundice	CbD, ESEGH	1
Skills		
Selects and interprets appropriate investigations and formulate management plans.	CbD, mini-CEX, ESEGH	1
Behaviours		
Approaches patients presenting with jaundice in a logical and methodical manner	CbD, mini-CEX, ESEGH	1,3,4

## Complications of Cirrhosis

### Portal Hypertension

#### Oesophageal Varices: Risk of Haemorrhage

<b>To be able to carry out specialist assessment of patients with chronic liver disease</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Understands the risk of variceal bleeding as a complication of with portal hypertension	ACAT, CbD, mini-CEX, ESEGH	1
Knows risk of variceal haemorrhage in cirrhotics who have not bled	ACAT, CbD, mini-CEX, ESEGH	1
Knows risk of bleeding related to variceal size, endoscopic findings and severity of liver dysfunction	ACAT, CbD, mini-CEX, ESEGH	1
Knows range of therapeutic options (both endoscopic and pharmacological).	CbD, ESEGH	1
<b>Skills</b>		
Recognises and can treat portal hypertension.	ESEGH, DOPS	1
<b>Behaviours</b>		
Manages patients with oesophageal varices with skill and compassion	MSF	1, 3, 4
Able to convey the serious risks to patients and their relatives	MSF	1, 3, 4

#### Oesophageal Varices: Acute Bleeding

<b>To be able to carry out specialist assessment, resuscitation, diagnosis and treatment of gastrointestinal bleeding patients with chronic liver disease</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Assesses the severity of liver dysfunction and its prognostic significance following haemorrhage.	ESEGH	1
Knows importance of correcting hypovolaemia, preventing complications of GI bleeding and deterioration of liver function, and stopping bleeding	ESEGH, CbD. ACAT	1
Knows the potential use of blood & clotting factors, the role of antibiotics, the use of vasoconstrictors, therapeutic endoscopy, the indication for transjugular intra-hepatic portosystemic shunt (TIPS) or surgical shunt surgery	ESEGH, CbD. ACAT	1
Aware of the specific complications of bleeding in cirrhotic patients – including hepatic encephalopathy, need for airway protection, nutrition, identification of alcohol withdrawal.	ESEGH, CbD	1
<b>Skills</b>		
Shows proficiency in endoscopy – including emergency endoscopic techniques of variceal band ligation, endoscopic sclerotherapy, injection of cyanoacrylate glues for gastric varices	DOPS	1
Can place safely and manage a Sengstaken tube in refractory variceal bleeding.	DOPS	1

Can prevent and treat complications including hepatorenal failure, ascites, spontaneous bacterial peritonitis and hepatic encephalopathy	ESEGH, CbD	1
<b>Behaviours</b>		
Appreciates criteria for referral to specialist centre when appropriate – such as with bleeding gastric or ectopic varices, or consideration of TIPS	CbD	1
Appreciates need to treat patients using a multi-disciplinary approach	CbD	1
Shows understanding of an empathic approach which may involve long-term lifestyle changes and a need for social support	CbD, MSF	1,3,4

### Variceal Bleeding: Secondary Prophylaxis

<b>To be able to carry out specialist assessment of patients with chronic liver disease</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows risks and prognosis of recurrent variceal bleeding in cirrhotic patients.	ESEGH	1
Aware of role of secondary prophylaxis with either non-selective $\beta$ -blockers, endoscopic ligation or both	ESEGH	1
<b>Skills</b>		
Can select suitable endoscopic therapy and perform the appropriate procedure competently.	DOPS	1,2
<b>Behaviours</b>		
Appreciates the potential role of other specialists e.g. interventional radiologists and nurse specialists	MSF	1

### Ascites & Spontaneous Bacterial Peritonitis (SBP)

<b>To be able to carry out specialist assessment and treatment of patients with ascites in chronic liver disease and its complications</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Defines the causes (both hepatic and non hepatic) of ascites, and has a clear understanding of their pathogenesis.	ESEGH	1
Recognises how to define resistant and refractory ascites	ESEGH	1
Understands the management of patients with ascites (including fluid restriction, use of colloids, diuretics) as well as the indications for and the role of interventional procedures such as paracentesis, TIPS	ESEGH, mini-CEX, CbD	1
Knows the value of laboratory investigation of acites including diagnosis of spontaneous bacterial peritonitis, its prognosis and treatment	ESEGH, mini-CEX	1,3
Appreciates the evidence for the prophylactic use of albumin infusions to reduce risk of hepatorenal syndrome	ESEGH	1
Understands the indications for alternative interventions (e.g. TIPS, surgical shunt, peritoneal-venous shunt and transplantation) and the criteria for appropriate referral	CbD, ESEGH	1
<b>Skills</b>		
Can perform safely both diagnostic and large volume paracentesis	DOPS	1,2



### Behaviours

Can refer patients in a timely manner to specialist liver services.	CbD	1
Understand the implications on quality of life, as well as the nutritional impact of resistant ascites	CbD	1
Shows ability to develop and sustain supportive relationships with patients and their families.	MSF	1,3,4

### Hepatorenal Syndrome

#### To be able to carry out specialist assessment and diagnosis of renal impairment / dysfunction in patients with chronic liver disease

Knowledge	Assessment Methods	GMP
Can define the different types (I and II) of hepatorenal syndrome(HRS)	ESEGH	1
Knows the differential diagnosis of different types of renal failure/impairment in liver disease	ESEGH, CbD	1
Understands the major and minor criteria in diagnosis of HRS and be able to differentiate between HRS and acute kidney injury.	ESEGH, CbD	1
Appreciates the prognostic significance of renal impairment in patients with chronic liver disease	ESEGH, CbD	1
Knows the options for management and treatment of HRS, the role of colloids and vasoconstrictors as well as renal supportive treatment by dialysis	ESEGH, CbD	1
Skills		
Uses and interprets result of sometimes complex investigations appropriately	ESEGH, mini-CEX, CbD	1
Behaviours		
Can judge when to involve other specialists especially nephrologists, radiologists and intensivists.	CbD, MSF	1,3,4

### Hepatic Encephalopathy (HE)

#### To be able to carry out specialist assessment of altered consciousness in the patient with chronic liver disease

#### To be able to differentiate between acute and acute on chronic liver injury

#### Encephalopathy indicated liver failure, and should prompt consideration for liver transplantation

Knowledge	Assessment Methods	GMP
Understands the pathogenesis of hepatic encephalopathy (HE).	ESEGH	1
Knows the differential diagnosis of HE including the existence of risk factors for its causation, including metabolic disorders and intracranial structural disorders (such as subdural haematomas)	ESEGH, CbD	1
Knows factors that may precipitate HE including bleeding, electrolyte disturbance, drugs or other organ failure.	ESEGH, CbD	1
Knows the various treatment options appropriate for grade of severity	ESEGH, mini-CEX, CbD	1
Skills		

Can grade the mental state (Glasgow coma score and West Haven Criteria)	ESEGH, mini-CEX	1
Shows ability to differentiate between acute and acute on chronic liver injury	ESEGH, CbD	1
Can identify the patient at risk of raised intracranial pressure and cerebral oedema	CbD, ESEGH	1
Selects and use investigations appropriately and determine timing of airway protection	ESEGH, CbD	1
<b>Behaviours</b>		
Appreciates the role of other specialists, and interacts in a professional manner with intensivists, neurologists, neurophysiologists, radiologists and other specialists.	MSF	1,3,4
Makes referral where appropriate to specialist centre for liver transplantation	CbD	1,3

## Sepsis

<b>The recognition of sepsis, its significance and prognosis in liver disease</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Recognises the importance of sepsis as a complication.	ESEGH	1
Aware of the differential diagnosis and management of sepsis and its possible sequelae	ESEGH, CbD	1
Knows the appropriate use of the appropriate antibiotics and their complications. Aware of prevention of nosocomial infection	ESEGH, CbD	1
<b>Skills</b>		
Understands the principles and practice of diagnosis and treatment of sepsis	ESEGH, CbD	1
<b>Behaviours</b>		
Prepared to involve and liaise with specialist sepsis support	MSF	1.3.4

## Nutrition

<b>To be able to make an objective assessment of nutritional status in the patient with liver disease</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the importance of clinical nutrition and its disturbances in patients with acute and chronic liver disease	ESEGH, CbD	1
Appreciates indications for enteral or parenteral support and understanding of limitations of these interventions	ESEGH, CbD	1
<b>Skills</b>		
Shows ability to make careful nutritional assessment.	mini-CEX, DOPS	1
<b>Behaviours</b>		
Can liaise with nutritional support team where appropriate	MSF	1

## Evaluation of Compound Severity of Liver Disease

Assessment of prognosis in chronic liver disease, specific liver diseases and in specific scenarios e.g. perioperative risk		
Knowledge	Assessment Methods	GMP
Understands prognostic scoring systems including Child - Pugh, MELD, UKELD, Maddrey and disease-specific scoring systems where they exist	ESEGH, CbD	1
Skills		
Builds the use of accredited quantitative scoring systems into routine clinical liver practice, clinical colleagues and junior staff	ESEGH, mini-CEX	1
Behaviours		
Shows consistent application of evidence-based assessment in the evaluation of liver disease and the determination of prognosis	CbD, MSF	1

## Specific Diseases

### Acute Liver Disease

**To recognise acute and acute on chronic liver disease. To understand the causes and differential diagnosis of acute hepatitis and chronic liver disease**

Knowledge	Assessment Methods	GMP
Understands the causes of acute hepatitis including viral, drug-induced, alcohol-induced and auto-immune liver disease	ESEGH	1
Knows the appropriate plan of investigation and management of specific diseases including the role of serological investigations and liver biopsy.	ESEGH, Cbd	1
Skills		
Takes an accurate history from patients with acute liver disease, and performs detailed clinical examination.	mini-CEX	1
Utilises investigation in a structured manner.	ESEGH Cbd	1
Behaviours		
Considers all therapeutic modalities and preparedness to refer to specialist centre where diagnosis remains in doubt or appropriate management cannot be performed	CbD	1,3

### Alcohol and the Liver

**To be able to carry out specialist assessment of alcohol related liver disease and help co-ordinate/deliver out-of-hospital support services, this should include:**

- **Social, epidemiology and socio-economic factors**
- **Awareness of resources available/needed to help both reduce the burden of disease and deal with alcohol related disease in the community with practical experience where possible**
- **Management of acute alcoholic hepatitis and decompensated liver disease with associated complications**
- **Alcohol withdrawal syndromes, Wernicke's encephalopathy**
- **Psychological dependence on alcohol and relevance to long term management**

Knowledge	Assessment Methods	GMP
Recognises the rising incidence of acute and chronic liver disease in the UK related alcohol abuse and, in particular, the increasing alcohol consumption in adolescents, young adults, women and growth in obesity.	ESEGH, Cbd	1
Is aware of the importance of community alcohol services and education in reducing the incidence and burden of alcohol related disease	CbD	1
Recognises alcoholic hepatitis, and understands the prognostic scores determined by Maddrey's discriminant function, the Glasgow alcoholic hepatitis score and their role in identifying which patients may benefit from corticosteroids. Can treat alcohol withdrawal.	ESEGH, mini-CEX, Cbd	1
Aware of appropriate use of benzodiazepines in alcohol withdrawal and can recognise the early signs of delirium tremens	CbD	1
Skills		

Is able to take a relevant history and perform appropriate examination	mini-CEX, Cbd	1
Is able to work in a community environment and provide support to Allied Health Professionals in the prevention / management of alcohol related disease	mini-CEX	1
Recognises those patients who would benefit from corticosteroids instituting treatment and has awareness of indications for withdrawing their use	ESEGH, Cbd	1
Aware of the potential complications of alcoholic hepatitis, chronic liver disease and able to prevent or intervene where appropriate	ESEGH	1
<b>Behaviours</b>		
Appreciates the role of other specialists, nurse specialists, intensivists, radiologists, dieticians, psychiatrists and addiction specialist	Cbd	1,3,4
Communicates effectively with at risk populations patients, their relatives in the context of their disease , its severity, prognosis and substance abuse	mini-CEX, MSF	1,3,4
Identifies the abstinent alcoholic who would benefit from transplantation	mini-CEX, Cbd	1
Considers all therapeutic modalities and preparedness to refer to specialist centre where diagnosis remains in doubt or appropriate management cannot be performed as per national guidelines	mini-CEX, Cbd	1

## Viral Hepatitis

<b>To be aware of hepatitis C &amp; B, those individuals at risk and the principles of treatment</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Understands the serological interpretation, categorisation and investigation of patients with chronic hepatitis B and/or C with particular emphasis on the need for treatment and surveillance	ESEGH	1
Recognises the particular populations at risk	ESEGH	1
Aware of national and international agreed guidelines on viral hepatitis management and use of interferon and antiviral drugs	ESEGH	1
Aware of hepatitis B reactivation in the context of immunosuppression	mini-CEX, Cbd	1
<b>Skills</b>		
Uses appropriate diagnostic modalities including serology, genotyping, viral load measurements, liver biopsy and related investigations	mini-CEX, Cbd	1
Monitors anti-viral and immunomodulatory therapies with appropriate investigations	ESEGH, mini-CEX, Cbd	1
<b>Behaviours</b>		
Communicates effectively with patients and relatives in the context of viral liver disease and underlying social and psychological risk factors	mini-CEX, MSF	1,3,4
Marshals multi-disciplinary support networks and in particular, recognise the crucial role of nurse practitioners in disease management	MSF	1,3,4

## Auto-Immune Liver Disease, Including Auto-Immune Hepatitis, PBC, PSC and Overlap Syndromes

<b>To understand the importance of diagnosis and treatments for autoimmune liver disease</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Recognises and appropriately investigates patients with auto-immune liver diseases	ESEGH	1
Aware of management and complications of autoimmune liver disease including extra-hepatic manifestations and associations including malignant complications in PSC	ESEGH	1
<b>Skills</b>		
Appreciates and understands that this range of liver disease is frequently under-diagnosed and may have been inappropriately managed	CbD	1
Selects appropriate immunomodulatory therapy, has awareness of side effects, and may well require specialist care.	mini-CEX, CbD	1
<b>Behaviours</b>		
Responds urgently to the management challenge of these severe and often acute diseases and involves more specialist services where required	CbD	1

## Metabolic Liver Disease

<b>To be aware of the prevalence, assess severity and select which patients with non-alcoholic fatty liver disease (NAFLD) may develop progressive disease. To be able to investigate, diagnose, and treat patients and family members with heavy metal associated liver disease</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Haemochromatosis and Wilson Disease: Recognises the importance but also difficulty in diagnosing heavy metal associated liver disease; has an understanding of the variants of both conditions	ESEGH	1
Understands the management of these diseases, including both screening and follow-up of siblings; identifies possible need for genetic counselling.	ESEGH, CbD	1
Fat-Related Liver Disease: Understands the prevalence of abnormal liver function tests in the context of fat associated liver disease	ESEGH	1
Recognises the associated metabolic syndrome	ESEGH, CbD	1
Assesses the severity of fibrosis including the role of non-invasive diagnostic techniques and indications for liver biopsy	ESEGH, CbD	1
Knows the importance in treatment of modifying lifestyle factors and potential for surgical and non-surgical interventions (in the setting of morbid obesity) in the prevention and progression of liver disease	mini-CEX	1,3
Alpha-1-Antitrypsin Deficiency: Knows the methods of diagnosis and implications of this condition and its associated co-morbidities	ESEGH	1

<b>Skills</b>		
Maintains diagnostic vigilance as uncommon metabolic liver diseases may go unrecognised and so retains awareness of them as diagnostic possibilities.	ESEGH, CbD	1
<b>Behaviours</b>		
Recognises the potential need to screen relatives and keeps up to date with contemporary developments of screening protocols	ESEGH, mini-CEX, CbD MSF	1,3,4
Liaises with clinical genetic unit where appropriate	ESEGH, mini-CEX, CbD MSF	1,3,4
Manages patients with steatohepatitis clearly and always sympathetically	ESEGH, mini-CEX, CbD MSF	1,3,4

### **Drug-Induced Liver Disease**

<b>To recognise drug induced liver injury (DILI), its severity and management</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Recognises and knows how to diagnose acute and chronic drug induced liver injury and dysfunction	ESEGH	1,2
Aware of methods of diagnosis, role of liver biopsy and therapy including role of steroids in treatment in selected cases	ESEGH, CbD	1
<b>Skills</b>		
Understands the role of both prescription and recreational drugs and the aetiology of a wide variety of liver disease and dysfunction often requiring prompt intervention or involvement of specialist services	ESEGH, CbD	1,2,3
Has awareness of the range of iatrogenic liver dysfunction	ESEGH, CbD	1,2,3
<b>Behaviours</b>		
Able to interact with specialist pharmacy services. Can use yellow card reporting system of potential adverse effects of drugs.	MSF	1,2,3

## f) Pancreatic and Biliary Disorders

### Gallbladder Disease

To understand the formation of gallstones, the complications to which they give rise and the means by which they are managed.

Knowledge	Assessment Methods	GMP
Knows the physiology and biochemistry of bile and the pathogenesis of gallstones	ESEGH	1
Is familiar with the normal anatomy and the anatomical variations of the biliary tree	ESEGH	1
Recognises the symptoms and signs of the potential complications of gallstone disease including biliary colic, acute cholecystitis, jaundice due to calculous bile duct obstruction, cholangitis, and carcinoma.	ESEGH, CbD	1
Knows the various techniques of diagnostic imaging including ultrasound, CT, MRI, ERCP, EUS, radionuclide techniques	ESEGH, CbD	1,3
Knows the various treatment options, the indications for operative and non-operative management and the risks of each	ESEGH, mini-CEX, CbD	1,3
Knows the current national guidelines for use of ERCP and the risks of the technique	ESEGH, mini-CEX, CbD	1,3
Knows the ways in which gallbladder polyps are diagnosed and managed.	ESEGH, mini-CEX, CbD	1
Knows that gallbladder and sphincter of Oddi dysfunction (SOD) may account for otherwise unexplained abdominal pain	ESEGH, CbD	1
Recognises different types of SOD, how they may present and how they are investigated	ESEGH, CbD	1
Skills		
Can select the most appropriate diagnostic and therapeutic techniques for each clinical situation	ESEGH, mini-CEX, CbD	1,2,3
Recognises possibility of diagnostic uncertainty in biliary dysmotility and shows thoughtful judgement in each individual situation	ESEGH, CbD	1,2,4
Behaviours		
Makes appropriate assessment, stratifies urgency and plans management of patients who have complications of gallstones	mini-CEX	1,3

### Acute Pancreatitis

To learn to make an early accurate diagnosis, stratify risk and plan management of patients with acute pancreatitis.

Knowledge	Assessment Methods	GMP
Knows the aetiology of acute pancreatitis Understands the means by which the condition is diagnosed	ESEGH, CbD	1
Is aware of the risk stratification and prognostic scoring systems such as Glasgow and Ranson; can apply this assessment to the management plan for individual patients.	ESEGH, mini-CEX, CbD	1
Knows the complications of severe attacks and the indications for intervention.	ESEGH, CbD	1,3



Knows how to initiate investigation of patients with recurrent unexplained attacks of pancreatitis.	ESEGH, CbD	1,3
<b>Skills</b>		
Shows ability to make early risk stratification and involve multi-disciplinary team and/or intensive care staff when appropriate	ESEGH, mini-CEX, CbD	1,3
<b>Behaviours</b>		
Collaborates closely with radiological and surgical colleagues where appropriate	CbD, MSF	1,3,4
Transfers patient to a specialist centre in accordance with guidelines	CbD, MSF	1,3,4

## Chronic Pancreatitis

<b>To recognise the presentation of chronic pancreatitis and learn how the disease is managed.</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Understands the causes, presentation, investigation and management of chronic pancreatitis	ESEGH, CbD	1
Knows the potential value of the various imaging modalities. Recognises the potential of blood and stool tests.	ESEGH, mini-CEX, CbD	1,3
Aware of the exocrine and endocrine consequences of the condition. Recognises complications.	ESEGH, CbD	1,2,3
Knows the value of endoscopic, non-invasive (ESWL) and surgical intervention	ESEGH, CbD	1,3
<b>Skills</b>		
Can diagnose the condition promptly	mini-CEX, CbD	1,3
Knows possible avenues of treatment, both to treat the consequences of pancreatic insufficiency and to control pain where appropriate	mini-CEX, CbD	1,3
Can recognise complications	CbD	1
<b>Behaviours</b>		
Works within multi-disciplinary team and liaises with colleagues in pain management	MSF	1,2,3,4
Shows empathy with patient and relatives	PS, mini-CEX	1,3,4

## Pancreatic Tumours

<b>To learn the presentation and multi-disciplinary management of patients with pancreatic tumours</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the presentation, investigation and staging of pancreatic cancer.	ESEGH	1
Recognises the importance of considering, and being able to identify, uncommon pancreatic tumours (such as neuroendocrine or intrapapillary mucinous tumours).	ESEGH, CbD	1
Knows the range of potential therapies and recognises the factors that make such tumours potentially operable or inoperable	ESEGH	1
Knows the prevalence and natural history of benign cysts/serous cystadenoma and potentially malignant cystic lesions	ESEGH	1

Knows the options for palliative treatment.	ESEGH, Cbd	1,3
<b>Skills</b>		
Shows ability to sequence investigations appropriately	mini-CEX, Cbd, MSF	1,3
Understands value of multi-disciplinary team	mini-CEX, Cbd, MSF	1,3
Recognises the importance of considering possibility that the tumour is unusual	mini-CEX, Cbd, MSF	1,3
<b>Behaviours</b>		
Communicates effectively within the multi-disciplinary team and with the patient and their family.	mini-CEX, Cbd, MSF, PS	1,3,4

## g) Endoscopy

### Foundations of Good Practice

To ensure a safe foundation is established in common theory and practise for endoscopy

#### Patient-Centred Practice

**To establish a firm foundation of patient centred practice in endoscopy with emphasis on consent and communication.**

Knowledge	Assessment Methods	GMP
Consent: <ul style="list-style-type: none"> <li>• Describes the components and legal aspects of informed consent</li> <li>• Lists specific issues for special considerations e.g. Jehovah's Witnesses, PEG tube insertion, withdrawal of consent and The Mental capacity and Mental Health Act</li> </ul>	ESEGH, DOPS	1,2
Patient comfort: <ul style="list-style-type: none"> <li>• Lists features of formal Comfort Scores and Quality Standards</li> </ul>	ESEGH, CbD	1,2
Communication: <ul style="list-style-type: none"> <li>• Outlines key features of excellent communications with patients, support staff, referring practitioners and managers</li> <li>• Describes communication framework for "breaking bad news"</li> <li>• Lists the benefits of patient feedback to the service for quality assurance</li> </ul>	ESEGH, CbD	1,2
Skills		
Demonstrates skill in taking consent, discussing results with patients and breaking bad news.	DOPS, MSF, mini-CEX	1,3
Demonstrates good communication skills, including difficult situations and breaking bad news	DOPS, MSF, mini-CEX	1,3
Behaviours		
Demonstrates working practices that support effective and efficient service delivery	MSF, PS	1
Demonstrates empathy with patients and support staff	MSF, PS	1
Maintain patients' dignity and privacy during procedures and sedation	MSF, PS	1
Practice is informed by review of comfort scores and quality standard adherence	MSF, PS	1

## Appropriateness

To demonstrate KSB in the appropriateness of endoscopy and risk management		
Knowledge	Assessment Methods	GMP
Risks of endoscopy: <ul style="list-style-type: none"> <li>Lists the risks of sedation and procedures, and of possible alternative interventions</li> </ul>	ESEGH, CbD	1,2
ASA status: <ul style="list-style-type: none"> <li>Describes the processes of formally assessing patient risk using pre-assessment clinics</li> <li>Lists the special risks of co morbidities such as diabetes, anticoagulation antibiotic prophylaxis etc</li> </ul>	ESEGH, CbD	1
	ESEGH, CbD	1
Skills		
Demonstrates safe practice	DOPS, MSF	1,3
Behaviours		
Demonstrates that practice adheres to guidelines on indications	Audit, MSF.	1

## Endoscope Design

To demonstrate knowledge and understanding of instrument design and function.		
Knowledge	Assessment Methods	GMP
Outlines the structure, functions and controls of endoscopes, the associated processing and imaging equipment.	ESEGH, DOPS.	1,2
Skills		
Demonstrates basic practical handling skills with understanding of scope function	DOPS, MSF	1,3
Behaviours		
Shows willingness to learn endoscope function	DOPS, MSF.	1

## Safety

To ensure knowledge of the principles and details of safe endoscopy practice.		
Knowledge	Assessment Methods	GMP
Lists the requirements for and techniques used in the decontamination of endoscopes and their accessories	ESEGH	1,2
Outlines the quality assurance of decontamination and the principles of appropriate unit design	ESEGH	1,2
Safe sedation: <ul style="list-style-type: none"> <li>Describes the pharmacology of frequently used drugs in endoscopy and the monitoring of sedated patients</li> </ul>	ESEGH	1
Diathermy: <ul style="list-style-type: none"> <li>Knows and understands the principles of diathermy, the associated risks and the detail of its application in endoscopy</li> </ul>	ESEGH	1

practice		
Complications of Endoscopy:	ESEGH	1
<ul style="list-style-type: none"> <li>Lists the procedure related risks of endoscopy, their incidence, minimisation, and the management of early and late complications</li> </ul>		
<b>Skills</b>		
Demonstrates safe practice in endoscopy, sedation and related procedures. Demonstrates knowledge of risks and their management.	DOPS, MSF	1,3
<b>Behaviours</b>		
Practises endoscopy safely with care and consideration	DOPS, MSF	1

## Quality

<b>To ensure knowledge of the principles of quality assurance in endoscopy and its measurement.</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Quality assurance in endoscopy:	ESEGH	1,2
<ul style="list-style-type: none"> <li>Describes methods of measuring quality in endoscopy, reporting systems, and the performance of endoscopists</li> </ul>		
Describes the quality assurance processes in endoscopy units, service improvement methods, assessment of quality and the Global Reporting Scale (GRS) as used by Joint Advisory Group on Gastrointestinal Endoscopy (JAG) in accrediting units for teaching	ESEGH	1
Lists the features of effective audit and its use as a QA tool	Audit, ESEGH	1
<b>Skills</b>		
Demonstrates use of electronic reporting systems and their use in audit of practise	DOPS, MSF	1,3
<b>Behaviours</b>		
Participates fully in QA processes	Audit, MSF	1

## Unit Management

<b>To understand the importance of good general management in delivering high quality endoscopy.</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Describes the role of endoscopists in the management of units in association with nurse and general managers	ESEGH	1,2
Outlines administrative and management systems	ESEGH	1,2
Recalls cancer management pathways, the principles and practice of cancer surveillance and screening	ESEGH	1,2
Describes the high level principles of budget management	ESEGH	1,2
Knows the ethical and quality aspects relating to management and leadership including approaches to use of resources, and approaches to involving the public and patients in making decisions	ESEGH	1,2
Understands management principles in assessing the equipment needs in terms of planned replacement of equipment, service development so as to ensure the endoscopy unit is both modern and	ESEGH	1,2

efficient		
Aware of the administrative structure and financing of the endoscopy unit within the context of the management structure of the trust	ESEGH	1,2
Demonstrates knowledge of risk management issues, including potential areas of risk	ESEGH,	1,2
<b>Skills</b>		
Performs regular audits of own and department's quality and contribute to department's management	Audit, MSF	1,3
<b>Behaviours</b>		
Participates fully in quality management initiatives in endoscopy services	MSF	1
Uses resources efficiently on a personal level	MSF	1

### Diagnostic Upper Gastro-Intestinal Endoscopy (Mandatory)

**To demonstrate appreciation of the appropriateness of case selection and the ability to perform upper GI endoscopy.**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Outlines the anatomy and pathology of the upper gastro-intestinal tract and its relevance to the practice of endoscopy	ESEGH, CbD	1
Describe the indications, contra-indications, risks, complications and alternatives to upper gastro-intestinal endoscopy, and the implications for consent	ESEGH, CbD	1
Describes the principles of case selection and timing of endoscopy	ESEGH, CbD	1
Describes the relevant specific pathology of the upper g-i tract	ESEGH	1
<b>Skills</b>		
Performs pre-procedure checks, appropriate application of local anaesthetic, give appropriate sedation and monitor patients during endoscopy	DOPS	1
Is able to handle and manipulate the controls and shaft of the endoscope to maintain optimal luminal view during the procedure	DOPS	2
Recognises lesions and manage appropriately	DOPS	1
Demonstrates accurate recording of the procedure and preparation of reports manually and electronically	DOPS	1
Undertakes effective discussion of the results of the examination with the patients and relatives including breaking bad news	mini-CEX	1,3
<b>Behaviours</b>		
Demonstrates judgement in case selection and management	DOPS, CbD, MSF	1
Demonstrates appropriate safe technique and judgement in case handling	DOPS	1,2
Demonstrates good communication with patient and support staff during the procedure	DOPS	1,3

## Basic Colonoscopy (optional)

To ensure a sound theoretical and practical foundation for full independent practice in basic diagnostic and therapeutic colonoscopy.

Knowledge	Assessment Methods	GMP
Describes the anatomy of the colon as it relates to colonoscopy	ESEGH	1,2
Describes the relevant specific pathology of the colon	ESEGH	1
Describes the indications, contra-indications, risks, complications and alternatives to colonoscopy, and the implications for consent	CbD, ESEGH	1
Describes the principles of case selection and timing of colonoscopy	mini-CEX, ESEGH	1
Lists the range of bowel preparations and their benefits and co-morbidity associated risks	mini-CEX, ESEGH	1
Outlines the specific properties of colonoscopes including image enhancing optical variations and scope guidance systems	mini-CEX, ESEGH	1
Demonstrates knowledge of shaft stiffness and its relevance to torque steering in the management of colonic loops	mini-CEX, ESEGH	1
Outlines the importance of quality standards in colonoscopy and colonoscopy units	mini-CEX, ESEGH	1
Skills		
Performs pre-procedure checks, appropriate application of local anaesthetic, give appropriate sedation and monitor patients	DOPS, MSF	1,3
Demonstrates endoscope handling with appropriate insertion techniques, accurate control, mucosal visualisation, pathology recognition, terminal-ileal intubation and biopsy technique	DOPS, MSF	1,3
Demonstrates basic polypectomy technique with accurate accessory handling, tattoo techniques, appropriate application of diathermy and the management of complications	DOPS, MSF	1,3
Demonstrates ability to prepare appropriate reports and discuss examination findings with patients and their relatives including breaking bad news	DOPS, MSF	1,3
Behaviours		
Demonstrates clinical judgement in patient selection and management with empathy and good communication	MSF, PS	1
Demonstrates team leadership with assistants and nurses to ensure safe practise	MSF	1,3
Practises within the limits of competence	MSF	1,2

## Flexible Sigmoidoscopy (optional)

**To ensure a sound theoretical and practical foundation for full independent practice in basic diagnostic and therapeutic flexible sigmoidoscopy**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Describes the anatomy of the colon as it relates to flexible sigmoidoscopy	ESEGH	1,2
Describes the relevant specific pathology of the colon	ESEGH	1
Describes the indications, contra-indications, risks, complications and alternatives to flexible sigmoidoscopy, and the implications for consent	ESEGH	1
Describes the principles of case selection and timing of flexible sigmoidoscopy	mini-CEX, ESEGH	1
Describes standard bowel preparation	ESEGH	1
Outlines the specific properties of colonoscopes including image enhancing optical variations and scope guidance systems	DOPS	1
Demonstrates knowledge of shaft stiffness and its relevance to torque steering in the management of colonic loops	DOPS	1
Outlines the importance of quality standards in flexible sigmoidoscopy	CbD	1
<b>Skills</b>		
Performs pre-procedure checks, appropriate application of local anaesthetic, give appropriate sedation and monitor patients	DOPS, MSF	1,3
Demonstrates endoscope handling with appropriate insertion techniques, accurate control, mucosal visualisation, pathology recognition, intubation to splenic flexure and biopsy technique	DOPS, MSF	1,3
Demonstrates basic polypectomy technique with accurate accessory handling, tattoo techniques, appropriate application of diathermy and the management of complications	DOPS, MSF	1,3
Demonstrates ability to prepare appropriate reports and discuss examination findings with patients and their relatives including breaking bad news	DOPS, MSF	1,3
<b>Behaviours</b>		
Demonstrates clinical judgement in patient selection and management with empathy and good communication	MSF	1
Demonstrates team leadership with assistants and nurses to ensure safe practise	MSF	1,3
Practises within the limits of competence	MSF	1,2



### 3. Advanced Specialist Areas

#### a) Advanced Inflammatory Bowel Disease

##### Advanced training in the diagnosis and management of inflammatory bowel disease

This section of the curriculum is designed to equip trainees to work in centres with a large workload of inflammatory bowel disease, including complex and tertiary referral disease, where a multidisciplinary approach is required.

Upon completion trainees will have a full understanding of the current state of knowledge regarding aetiology of IBD, have a full understanding and experience of its diagnosis and the differentials, and wide experience and knowledge of management strategies available for IBD. This will include advanced knowledge of medical therapies, including those undergoing clinical trials, surgical options, and the importance of a multidisciplinary approach which centres on the patient. The curriculum will also allow trainees to develop experience of specific areas within IBD including IBD in pregnancy and adolescence, and of specific complications and problems such as extraintestinal manifestations, nutrition as support and as therapy, and surveillance strategies for colorectal carcinoma.

In order to develop the necessary skills and experience the trainee will be expected to attend specialist IBD outpatient clinics, to develop experience of the indications, initiation and monitoring of biological and immunosuppressive therapy, undertake appropriate endoscopic evaluations of IBD including complex IBD and cancer surveillance, and develop experience of the inpatient management of IBD patients including those with complex chronic disease and acute severe disease.

The curriculum will be delivered in one or more centres which have a large IBD workload and which have a well developed multidisciplinary team including gastroenterologists, surgeons, histopathologists, radiologist and IBD Nurse Specialists. These centres will also provide specialist services in one or more areas such as pregnancy, nutrition or adolescence.

The curriculum will be followed over a 12 month period in conjunction with standard clinical training within the curriculum to allow experience of the natural history of IBD over time, and to understand the impact of the disease on the patients.

Assessment will be undertaken on the basis of the portfolio of clinical experience, case based discussions, mini-CEX assessments and direct observation of practical procedures.

#### General Understanding of Disease

Understanding the state of knowledge of pathogenesis of IBD, and the principles underlying treatment		
Knowledge	Assessment Methods	GMP
Knows the science underlying the pathogenesis of IBD, in particular relating to genetic and environmental factors involved, and	ESEGH	1

differences between UC and Crohn's disease		
Understands the natural history of UC and Crohn's disease, including its variability and the impact of therapy on the natural history	ESEGH	1
Understands the mechanism of action (as far as it is understood) and rationale for using different treatment types in IBD including aminosalicylates, immune suppressants and biologic therapies	ESEGH, CbD	1
<b>Skills</b>		
Able to use knowledge of modifiable and non-modifiable risk factors to underpin management decisions and to stratify risk for patients and their relative	ESEGH, CbD	1,3,4
<b>Behaviours</b>		
Able to explain to patients and their families the concepts underlying the disease, and the factors that they can alter, and the risks of complications and disease susceptibility in relatives	mini-CEX, MSF, PS	1,2,3,4

## Diagnosis

<b>To understand the methods of diagnosis including major differentials and to provide advice in cases where the diagnosis is unclear</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the major differential diagnoses of IBD, including infection – viral, bacterial, and amoebic, vasculitis, ischaemia, Behcet's disease, irritable bowel syndrome etc	ESEGH	1
Knows the appropriate investigations to distinguish the above, and their limitations	ESEGH, CbD	1
Knows the differential when patient with know IBD presents with symptoms including – active IBD, bacterial overgrowth, bile salt malabsorption, obstruction	ESEGH, CbD, mini-CEX	1
<b>Skills</b>		
Able to identify appropriate investigations to make a positive diagnosis of IBD or to exclude it	ESEGH, CbD	1
Able to interpret the results of the above investigations	ESEGH, mini-CEX, CbD	1
<b>Behaviours</b>		
Outline to patients the possible causes of their symptoms	mini-CEX, MSF	1,3,4
Explains and initiates the appropriate sequence of investigations	mini-CEX,	1,3
Can explain to patients the outcome of the investigations and their implications	mini-CEX	1,3

## Assessment

<b>The assessment of disease activity and extent including complications</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Understands the appropriate investigations for assessing disease activity and extent including: <ul style="list-style-type: none"> <li>inflammatory markers in blood (ESR, CRP, highly sensitive</li> </ul>	ESEGH, mini-CEX, CbD	1

CRP) and stool (faecal calprotectin, lactoferrin etc) and imaging techniques, including <ul style="list-style-type: none"> <li>upper and lower GI endoscopy, CT and MRI scanning, capsule endoscopy, enteroscopy and barium imaging</li> </ul>	ESEGH, Cbd	1
Understands the circumstances in which disease activity and extent should be reassessed, and when complications should be suspected (e.g. perforation, abscess formation, fistulisation)		
<b>Skills</b>		
Able to make a clinical assessment of a patient and determine the requirement for further assessment using inflammatory markers and imaging	ESEGH, mini-CEX, Cbd	1
Can suspect the presence of complications appropriately and take appropriate action in terms of investigation and management	ESEGH, mini-CEX, Cbd	1,2
<b>Behaviours</b>		
Explains the extent and activity of disease to patients, and to explain their implications	mini-CEX, MSF	1,2,3,4,
Can liaise with IBD nurses, radiologists and other healthcare professionals to ensure timely investigation and appropriate management of IBD and its complications	mini-CEX, MSF	1,3

### IBD Multidisciplinary Team

<b>To understand the importance of the MDT in decision making, and to use it to maximise the quality of patient care</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Understands the importance of multidisciplinary decision making including when radiological, histopathological and surgical opinions should be sought	ESEGH, mini-CEX, Cbd, MSF	1,3
Understands the role of the IBD nurse within the MDT, and in communicating with patients and their relatives	mini-CEX, MSF	1,3
Recognises the importance of other healthcare professionals in providing high quality care including dieticians and pharmacists	mini-CEX, MSF	1,3,4
Aware of the surgical options available in IBD and how to access them	mini-CEX, Cbd	1,3
<b>Skills</b>		
Has appropriate discussions with other specialties including surgeons, and other healthcare professionals	mini-CEX, Cbd	3
Can participate in an IBD MDT effectively	mini-CEX, MSF	3,4
Relates well with all other healthcare professionals involved in IBD patient care, especially the IBD Nurse Specialist	mini-CEX, MSF	3,4
<b>Behaviours</b>		
Shows commitment to team-working and shows understanding of the roles of other healthcare professionals with courtesy	MSF	3,4
Explains decision making process to the patient clearly and sympathetically	mini-CEX, MSF	3,4

## Surgery and IBD

<b>To understand the indications for surgery in IBD and the importance of good medical- surgical liaison in good decision-making</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Understands the indications for surgery in active disease, and for complications including structuring and fistulising disease	ESEGH, CbD	1
Understands different surgical approaches, in particular, methods of bowel-preserving surgery in Crohn's disease and long term options for surgery in UC	ESEGH, CbD	1,2
Recognises that early liaison with surgeons is important in high quality patient management	ESEGH, CbD	1,2,3
<b>Skills</b>		
Has appropriate discussions with surgeons when patients are admitted with active disease	CbD, MSF	1,3
Involves surgeons early in patients with difficult chronically active disease or with complications	CbD	1,3
Is able to explain clearly to patients and relatives the role of the surgeon and possible surgical approaches to treatment	PS, mini-CEX	1,3
<b>Behaviours</b>		
Shows willingness to liaise appropriately with surgical teams	mini-CEX, MSF	3
Explains clearly to patients and relatives the involvement of the surgical teams and their importance and possible outcomes	mini-CEX, PS	3,4

## Treatment Options and Individualised Care

<b>To understand the treatment options available and to discuss with appropriately to provide individualised patient care</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the different treatment modalities for IBD given the disease extent, activity, previous history and complications	ESEGH, CbD	1
Knows the modes of delivery of different drug therapies and their advantages and disadvantages	ESEGH, CbD	1
Recognises the importance of patient choice in deciding therapy and in helping to ensure adherence	mini-CEX	1,3
Understands when surgery is the most appropriate therapeutic option and to make appropriate referrals	ESEGH, CbD	1,3
<b>Skills</b>		
Demonstrates the ability to identify the possible range of appropriate treatments for a particular patient and have an appropriate discussion allowing the patient and doctors to come to a sensible consensus	mini-CEX, CbD	1,2,3,4
<b>Behaviours</b>		
Effectively communicates the possible treatment options, and the potential benefits, complications and side effects of each	mini-CEX	1,2,4

## Endoscopic Surveillance

Experience of endoscopic surveillance for colorectal cancer using chromoendoscopy		
Knowledge	Assessment Methods	GMP
Knows the principles of colorectal cancer surveillance in IBD	ESEGH	1
Knows the principles of chromoendoscopy and its application to IBD	ESEGH, DOPS	1
Knows the potential of other imaging modalities that may have role in surveillance.	ESEGH, CbD	1
Knows the appearances of DALM and potentially serious mucosal abnormalities during surveillance colonoscopy	ESEGH, DOPS	1
Skills		
Has experience of surveillance colonoscopy with both white light examination and chromoendoscopy	DOPS	1
Realises importance of close liaison with histopathologists in interpreting abnormal biopsies	ESEGH, mini-CEX, DOPS	1,3
Behaviours		
Can discuss with patients and relatives the rationale for and results of endoscopic surveillance including the possible requirement for colectomy	mini-CEX, PS	1,2,3

## Complex Fistulising Crohn's Disease

To understand and have experience of complex fistulising Crohn's disease		
Knowledge	Assessment Methods	GMP
Knows the pathogenesis and complications of fistulising Crohn's disease including perianal, enteroenteric, enterocutaneous, colovesical and rectovaginal fistulae	ESEGH	1
Understands the different treatment modalities available for treatment of fistulae, including antibiotics, immune modulators, biologics, surgical drainage and the possible combinations that may be required	ESEGH, CbD	1
Is aware of the importance of joint medical-surgical management of complex fistulae, and of nutritional support for high output fistulae	ESEGH, CbD	1,3
Skills		
Able to detect the possibility of fistulising disease, and to perform appropriate investigations	mini-CEX, CbD	1
Can liaise with surgical colleagues to define the most appropriate management plan	MSF	3
Behaviours		
Can make an appropriate assessment of fistulae, including deciding a long term management strategy	mini-CEX	1
Can provide an appropriate explanation of the problem to the patient.	PS	1,4
Involves all relevant health professionals, and patient in deciding the appropriate treatment strategy	mini-CEX, MSF	1,3

## Reproductive Health, Pregnancy and Lactation

Understanding the effect of IBD and its treatment on reproductive health, pregnancy and lactation		
Knowledge	Assessment Methods	GMP
Knows the effect of active IBD, drug therapy and surgery on fecundity and pregnancy, specifically issues relating to immune suppressants, biological therapy and surgery.	CbD, ESEGH	1
Knows the effect of IBD and its treatment on breast feeding	ESEGH	1
Knows the effects of the disease and its treatment on the chances of conception for men with IBD	ESEGH	1
Skills		
Appreciates when to alter treatment to take account of pregnancy and breast feeding	ESEGH	1
Can provide accurate advice about the effect of disease, treatment and surgery on fecundity, pregnancy and lactation	mini-CEX, ESEGH	1
Behaviours		
Can discuss in an appropriate manner the treatment options for patients wishing to conceive, who are already pregnant or who wish to breast feed	mini-CEX	1,3
Explains the issues relating to treatment to those patients and their partners who are planning to conceive so as to enable them to make informed choices.	mini-CEX, PS	1,3

## Co-Morbidity and IBD

Understanding of the effects of concurrent medical conditions on the treatment of IBD		
Knowledge	Assessment Methods	GMP
Knows the risks relating to a previous history of malignancy or the development of malignancy in IBD, in particular to understand how this affects treatment options.	ESEGH, CbD	1
Knows the risks relating to infection with hepatitis B, hepatitis C and HIV connected with treatment of IBD	ESEGH	1
Knows the circumstances in which patients should be screened or immunised for infectious diseases before commencing therapy	ESEGH, CbD	1
Skills		
Can identify patients at risk for particular treatment due to concurrent or previous medical conditions	ESEGH, mini-CEX, CbD	1,2
Can identify patients who need to be screened or immunised for infectious diseases prior to therapy	ESEGH, CbD	1,2
Understands the treatment options available for patients with pre-existing medical conditions	ESEGH, CbD	1
Behaviours		
Can explain to patients the reasons for screening /immunising	mini-CEX	1,3
Can explain the way that treatment may be affected by other medical conditions and to start appropriate treatment	mini-CEX	1,3

## Nutrition

<b>To understand the nutritional principles underlying IBD</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the role of nutrition as therapy for active IBD	ESEGH	1
Knows the role of dietary alteration in treatment of symptoms of IBD e.g. low residue diet for stricturing disease	ESEGH, CbD	1
Knows the mechanism of nutritional deficiency in IBD, the importance of gut preservation, and the role of nutritional support in IBD	ESEGH, CbD	1
Understands the circumstances when nutritional support should be provided by enteral or parenteral routes, and to know the various methods of delivery	ESEGH, CbD	1
Understands the possible methods of maximising bowel preservation including appropriate medical therapy, endoscopic therapy and bowel preserving surgery	ESEGH, CbD	1,3
<b>Skills</b>		
Uses enteral feed as therapy for active disease in appropriate patients, and to alter diets as appropriate to improve symptoms	ESEGH, mini-CEX, CbD	1
Can use enteral and parenteral nutrition appropriately to support patients with active IBD and to prevent substantial malnutrition	mini-CEX, CbD	1
Can perform colonoscopic balloon dilatation to prevent the requirement for resection, and to understand when to refer for enteroscopic dilatation or for a surgical opinion	DOPS, CbD	1
<b>Behaviours</b>		
Explains to patients and relatives the importance of nutrition as treatment and support	mini-CEX, PS	1,3,4
Can work with the MDT to ensure all treatment decisions maximise bowel length	CbD	1,3
Liaises with dieticians and other healthcare professionals to ensure that all patients have appropriate nutritional support	CbD, MSF	1,3,4

## Paediatric to Adult Transition

<b>To understand the issues facing adolescents with IBD and the handover of care to adult gastroenterologists</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Appreciates the differences in approach between paediatric and adult IBD management	ESEGH, CbD	1
Knows the importance of maintaining adequate growth and maintenance of full time education	ESEGH, CbD	1
Has awareness of the particular issues concerning IBD in adolescents and appreciate the practical problems in transition to adult care	ESEGH, CbD, mini-CEX	1,3
<b>Skills</b>		
Has experience of adolescent transition clinics and to understand the key personnel and structural issues	mini-CEX, CbD	1,3

Relates to young patients and understand their concerns about disease and its treatment	mini-CEX	1,3
<b>Behaviours</b>		
Able to discuss the treatment of IBD with the patient and parents in an approachable and appropriate way, respecting the primary duty to the patient	mini-CEX	1,3,4
Can successfully take over from paediatricians the care of young people with IBD and manage their ongoing IBD care	mini-CEX	1,2,3,4

## Novel Therapies

<b>Experience novel therapies in IBD, and of clinical trials used to pilot their introduction</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the principles underlying the development of current new therapies in IBD	ESEGH	1
Understands the principles of "Good Clinical Practice" in a clinical trial context (GCP)	ESEGH, Cbd	1
Knows when entry into a clinical trial might be appropriate for a patient with IBD	ESEGH, Cbd	1,3,4
<b>Skills</b>		
Has ability to explain to a patient the background to a new therapy and the risks and benefits of entering a clinical trial of new treatment	mini-CEX	1,2,4
Can meet the standards set by GCP in clinical trials	mini-CEX	1,2,4
<b>Behaviours</b>		
Gains experience of relating to patients and study subjects during ongoing clinical trials as an investigator or subinvestigator	Cbd	1,3
Can take informed consent for research participants in clinical trials	DOPS	1,2,3,4



## **b) Advanced Nutrition**

**Designed for a trainee who wishes to develop their practice of nutrition to a more advanced level than the standard set in the core syllabus. It includes those who will work as a trainee in a level 3 or 4 Intestinal Failure/Home Parenteral Nutrition (IF/HPN) unit.**

### **General Comments**

The core curriculum gives the trainee the basic understanding that undernutrition is common (up to 40% of hospital inpatients), is present in all specialities, and is often undetected and thus not treated. No single specialty looks after undernourished patients. However gastroenterologists often take the lead in this area, as it is usually the gut that fails and gastroenterologists have the skills to address this. This means that the gastroenterologist must work closely with many other specialities. Gastroenterologists may chair trust nutritional steering groups and are often the clinical lead for a nutrition support team (NST). As it is now recommended by NICE that all hospitals in England have nutrition support teams, it is essential that gastroenterologists take an interest in nutritional support, and therefore that a proportion of trainees reach a more advanced level than the core nutrition syllabus would normally allow.

This advanced part of the curriculum will equip a specialty registrar with an interest in nutritional support not only to have the knowledge and experience to take the lead role in nutritional support within a hospital but also to be able to care for patients in a level 3 or 4 IF/HPN unit. The StR must be able to work effectively in a multidisciplinary NST and work especially closely with surgical colleagues.

There are important principles that underlie the care of patients needing interventional nutritional support, and which must be clearly understood:

1. The underlying condition and its outcome.
2. Gastrointestinal and nutritional physiology.
3. Nutritional and fluid requirements and how they are determined
4. The indications, contraindications and complications of enteral and parenteral feeding.
5. The definitions and causes of intestinal failure (IF) with an awareness of a patients remaining gut anatomy.
6. The management of patients with complex IBD.

The advanced module will deliver on these six principles with experiential exposure. The rest of this document goes into further detail and divides the competencies into general nutrition (re-emphasizing the core components), intestinal failure generally, then specific conditions that can cause intestinal failure, parenteral and enteral nutrition, eating disorders and finally the ethical and legal aspects of giving artificial nutritional support.

### **Glossary:**

IF: Intestinal failure  
PEG: Percutaneous endoscopic gastrostomy  
PN: Parenteral nutrition  
PEJ: Percutaneous endoscopic jejunostomy  
EN: Enteral nutrition

PEGJ: PEG with jejunostomy  
 HPN: Home parenteral nutrition  
 NJ: Naso-jejunal  
 HEN: Home enteral nutrition  
 LFT: Liver function tests  
 IBD: Inflammatory bowel disease  
 RIG: Radiologically inserted gastrostomy  
 ITU: Intensive care unit  
 NST: Nutrition support team  
 PINNT: Patients on Intravenous and Nasogastric Nutrition Therapy  
 PICC: Peripherally inserted central catheter  
 BMI: Body mass index  
 %WL: Percentage weight loss  
 BANS: British artificial nutrition survey

## General Nutrition

<b>The general principles of nutritional support (re-emphasis of the core curriculum).</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the prevalence of undernutrition in the community, care settings and hospitals	AA, ESEGH	1
Appreciates the costs to the NHS of undernourished patients	ESEGH	1
Understands the consequences of undernutrition (at organ and molecular levels)	ESEGH	1
Knows how to perform nutritional screening and assessment (BMI, %WL, likely oral intake over next 5 days, mid arm circumference and muscle mass, grip dynamometry etc). Know that albumin is not a nutritional marker	ESEGH	1
Estimates a patient's nutritional requirements (energy, protein, water, electrolytes, trace elements and vitamins) in health and in different circumstances (e.g. perioperatively, critical care etc) and with different illnesses	ESEGH	1
Knows the causes for dysphagia (e.g. cerebro-vascular disease) and be able to assess swallowing	ESEGH	1
Understands how the catering system operates in a hospital	ESEGH	1
Knows how food can be fortified and know the types of oral nutritional supplements available	ESEGH	1
Understands how to assess a patient for the risks of developing refeeding problems	ESEGH	1,2
Knows the benefits and risks of EN and PN	ESEGH	1
Knows the different roles of each member of a NST (clinician, nurse, dietician and pharmacist)	ESEGH	1,2,3
<b>Skills</b>		
Performs a nutritional assessment	DOPS	1
Is able to select appropriate fluids and nutrition in the early post-operative phase	CbD, mini-CEX	1
Can identify and treat patients at risk of refeeding problems	CbD, mini-CEX	1,2

Recognises vitamin and mineral deficiencies and conditions in which they are likely to occur (e.g. vit A deficiency with severe steatorrhoea) and be able to give appropriate treatment	CbD, mini-CEX	1,2
Selects method and route of feeding	CbD, mini-CEX	1,2
Inserts enteral feeding tubes NG and PEG	DOPS	1,2
Selects appropriateness for a PEG or RIG	CbD	1,2
Enters patient on BANS	TO	1,3
<b>Behaviours</b>		
Works within and lead a multidisciplinary NST	MSF	1,2,3,4
Has the expertise to be able to chair a nutrition steering committee	MSF, TO	1,2,3,4
Is able to balance the benefits and risks of the methods of giving artificial nutritional support	CbD, mini-CEX	1,2,3,4

## Intestinal Failure: General

<b>What is meant by intestinal failure, how it is classified and its severity measured</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the anatomy and physiology of the gut and thus the consequences of the loss of all or part of the stomach, jejunum, ileum and colon and associated organs (e.g. pancreas and gallbladder)	ESEGH	1
Understands gastrointestinal fluid losses in the fasting state and after food	ESEGH	1
Knows where different macro/micronutrients, water, electrolytes, vitamins and trace elements are absorbed	ESEGH	1
Can define, classify and grade the severity of intestinal failure. Knows the appropriate investigations required to fully assess a patient with IF	CbD, mini-CEX, ESEGH	1,2
Knows the current criteria for referral for consideration of a small intestinal (+/-and liver) transplant and know the current chances of patient survival, graft survival and the patient being able to completely stop PN	mini-CEX, ESEGH	1,2
Has knowledge of congenital gut disorders that may necessitate nutritional support (e.g. volvulus).	CbD	1
<b>Skills</b>		
Can take a relevant history from patients with IF and perform a relevant clinical examination - including inspection of abdominal wounds, fistulas and at the stoma/fistula outputs, and inspecting any tubes/catheters and appliances	DOPS	1,2
Understands the underlying disease process and its appropriate management.	CbD, mini-CEX	1,2,3,4
Understand the surgical procedures and the remaining gastrointestinal anatomy (be able to draw a diagram of the remaining gastrointestinal anatomy)	CbD	1,2
Can predict the outcome in terms of the nutritional and fluid support needed and predict the duration for which this support is needed	CbD, mini-CEX	1,2
Can select and administer the most appropriate fluid and nutritional support	CbD, mini-CEX	1,2,3

Can help to plan the time for any corrective surgery	CbD, mini-CEX	1,2,3,4
Understands and works with psychological medicine to address the psychological/emotional needs of a patient	MSF, TO	1,2
Can discuss possible referral for intestinal transplantation when appropriate.	CbD, mini-CEX	1,2,3,4
<b>Behaviours</b>		
Has a structured approach to managing a patient who presents with intestinal failure	CbD, mini-CEX	1,2
Works with the multidisciplinary NST and other specialties (e.g. pain team, stoma care, tissue viability, psychological medicine)	MSF, TO	1,2,3,4
Gives care appropriate to the patient's needs and anxieties, and can liaise with the patient, carers, friends and family	MSF	1,2,3,4

## Short bowel: Jejunostomy / High Output Stoma

### Managing the problems of a small bowel stoma with a high volume output.

Knowledge	Assessment Methods	GMP
Has knowledge of stomas includes understanding how, why and where a stoma is formed	ESEGH	1
Appreciates the difference between a jejunostomy, ileostomy and colostomy and the problems that can result from each	ESEGH	1
Understands the role of a stoma care nurse and the problems with which she/he can help (leakage, poor stoma etc)	MSF	1,3
Understands the underlying diseases that result in a jejunostomy being fashioned	CbD, mini-CEX, ESEGH	1
Has a systematic approach to investigating the causes of a high output stoma	CbD, mini-CEX, ESEGH	1,2
Understands the principles of treatment including restricting oral hypotonic fluid, drinking a glucose-saline solution and the use of drugs (antidiarrhoeal and antisecretory)	CbD, mini-CEX, ESEGH	1,2
Knows when parenteral support is needed including subcutaneous saline and magnesium	CbD, mini-CEX	1,2
Able to predict patient outcome in terms of fluid and nutritional needs from knowledge of how much functional bowel remains	CbD, mini-CEX	1,2
Knows the long term problems of having a jejunostomy (dehydration/renal failure, gallstones, liver fibrosis and osteoporosis)	CbD	1
Is aware of other surgical options in short bowel (reverse segment, intestinal lengthening etc)	CbD, mini-CEX	1
Understands the principles of feeding into bowel that is not in continuity (fistuloclysis)	CbD, DOPS, mini-CEX	1
Knows how remaining bowel length can be measured (at surgery or radiologically)	TO	1
<b>Skills</b>		
Can use/apply the different types of stoma bag / drainage bag and how they are used	MSF, TO	1,2,3,4
Can explain to a patient why drinking hypotonic fluid is detrimental	CbD, mini-CEX	1,2,3,4

Can investigate the causes of a high output stoma (other than a short bowel)	CbD, mini-CEX	1,2
Can choose the most appropriate fluid, nutrition and drug treatments and route by which they are given	CbD, mini-CEX	1,2,3
<b>Behaviours</b>		
Is able to explain the principles of management to patients, carers, friends and family and be able to manage long-term problems (osteoporosis, gallstones, renal stones and poor venous access)	MSF	1,2,3,4
Works closely within the multidisciplinary NST especially with the dieticians	MSF	1,2,3,4

## Short bowel: Jejunum in Continuity with Colon

<b>Managing a patient with a short length of bowel in continuity with all or part of their colon.</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the advantages of having a colon in situ in terms of fluid and nutritional requirements and appreciates desirability of restoring intestinal continuity where possible.	ESEGH	1,2
Appreciates these patients mainly have problems from becoming slowly undernourished, and that they rarely have fluid balance problems	CbD, mini-CEX, ESEGH	1,2
Knows the principles behind a high polysaccharide, low oxalate diet (but one in which the fat content is not increased)	CbD, mini-CEX, ESEGH	1
Understands the mechanisms of intestinal adaptation and the time over which it occurs	CbD, mini-CEX, ESEGH	1
Appreciates the problems which are specific to this type of patient with a short bowel namely calcium-oxalate renal stones and d- lactic acidosis	CbD, mini-CEX, ESEGH	1,2
<b>Skills</b>		
Recognises when dietary measures are inappropriate and PN is needed	CbD, mini-CEX	1,2,3
Can recognise when intestinal adaptation has occurred and PN can be stopped	CbD, mini-CEX	1,2,3
Gives appropriate dietary advice and prescribe drugs to reduce diarrhoea (including bile sequestering agents)	CbD, mini-CEX	1,2,3,4
<b>Behaviours</b>		
Can explain to the patient, carers, friends and family the relevance of the preserved colon and thus advise about what the patient should eat	MSF	1,2,3,4
Works closely within the multidisciplinary NST especially with dieticians	MSF	1,2,3,4

## Inflammatory Bowel Disease

<b>Managing patients with complex inflammatory bowel disease needing nutritional support.</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Appreciates that preserving bowel length is important	CbD, mini-CEX, ESEGH	1,2
Knows how to use immunomodulating or biological drugs to treat IBD so as to maintain a maximum bowel length and avoid resections that may result in a short bowel	CbD, mini-CEX, ESEGH	1,2
Knows endoscopic and surgical techniques that avoid bowel being resected (e.g. balloon dilatation and sphincteroplasty)	CbD, mini-CEX	1
Knows the dietary therapies available to reduce disease and symptoms (e.g. for intermittent obstruction I giving a liquid or low fibre diet).	CbD, mini-CEX	1,2
<b>Skills</b>		
Appreciates that preserving bowel length is important	CbD, mini-CEX, CE	1
Can use immunomodulating or biological drugs to treat IBD so as to maintain a maximum bowel length and avoid resections that may result in a short bowel	CbD, mini-CEX, CE	1,2
<b>Behaviours</b>		
Can empathise with and appreciate the needs of patients with IBD	MSF	1,2,3,4
Works within the multidisciplinary NST and also with the IBD nurses and surgeons	MSF	1,2,3,4
Discuss any issue relating the disease honestly with the patient, carers, friends and family	MSF	1,2,3,4

## Ischaemia

<b>Managing the consequences of having small bowel removed due to ischaemia.</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the causes of small bowel infarction	CbD, mini-CEX	1
Knows the difference between arterial and venous gut infarction	CbD, mini-CEX	1
Understands the problems and timing of anastomosing the small bowel onto the colon	CbD, mini-CEX	1,2
Knows the different methods of imaging the vascular supply to the gut (e.g. CT angiography, digital subtraction angiography, angiograms etc)	CbD, mini-CEX	1
<b>Skills</b>		
Is able to investigate the causes of a small bowel arterial or venous infarction	CbD, mini-CEX	1
Can identify other co-existing vascular problems	CbD, mini-CEX	1,2
Can choose the appropriate route for nutritional support (EN or PN)	CbD, mini-CEX	1,2
Be able to feed into defunctioned gut (fistuloclysis) when appropriate	DOPS	1
<b>Behaviours</b>		

Works within the multidisciplinary NST and with the vascular surgeons and Haematologists	MSF	1,2,3,4
Appreciates there may be other co-morbidities that limit treatment	CbD, mini-CEX	1
Can discuss disease-related issues honestly with the patient, carers, friends and family	MSF	1,2,3,4

## Post-Operative Complications

### Understand the principles of managing complex post operative problems especially an enterocutaneous fistula.

Knowledge	Assessment Methods	GMP
Knows the principles of normal post operative care including early fluid management (avoiding excessive saline) and having a knowledge of when to start nutritional support	CbD, mini-CEX, ESEGH	1,2
Appreciates the reasons why surgical wounds and anastomoses can break down	CbD, mini-CEX	1,2
Knows the stages of development of an enterocutaneous fistula and thus the appropriate fluid/nutritional management at each stage	CbD, mini-CEX	1,2
Understands how complex abdominal wounds are dressed (e.g. wound manager bags)	CbD, mini-CEX	1,2
Understands what is meant by a frozen abdomen and sclerosing peritonitis	CbD, mini-CEX	1
Knows why intestinal obstruction occurs and the ways in which it can be managed	CbD, mini-CEX	1,2
Knows why abdominal surgery is best avoided 10-100 days after the last abdominal operation	CbD, mini-CEX	1,2
Knows the principles of enhanced recovery after surgery (ERAS) (including reducing insulin resistance and saline excess).	CbD, mini-CEX	1,2
Skills		
Can institute an appropriate investigation plan for occult sepsis	CbD, mini-CEX	1,2
Can assess whether an enterocutaneous fistula is likely to close spontaneously	CbD, mini-CEX	1
Is able to prescribe appropriate pain relief (often with the pain team)	MSF	1,2,3,4
Can assess fluid losses and thus give appropriate fluid replacement	CbD, mini-CEX	1,2
Appreciates the principle of later restorative surgery	CbD, mini-CEX	1
Is able to arrange the appropriate tests for mapping the remaining gut (both that is in and out of circuit)	CbD, mini-CEX	1
Gives appropriate psychological care with the psychological medicine team	MSF	1,2,3,4
Helps a patient to be physically and emotionally well so they are able to tolerate more surgery if necessary or be able to cope at home	CbD, mini-CEX	1,2,3,4
Can feed into defunctioned gut (fistuloclysis) when appropriate	DOPS	1
Behaviours		
Understands role of tissue viability nurses and can integrate care with them	MSF	1,2,3,4

Explains to patients their anatomy, the principles of intended treatment and any procedures	MSF	1,2,3,4
Understands the slow nature of the recovery process (except when complications such as sepsis, bleeding or clots occur) and appreciates that patients may have episodes of being very unwell and maintains their trust throughout.	MSF	1,2,3,4
Can maintain liaison with the multidisciplinary NST, surgeons and intensivists as necessary	MSF	1,2,3,4
Can discuss all issues openly and honestly with the patient, carers, friends and family	MSF	1,2,3,4

## Enteric Dysmotility

<b>Management of enteric dysmotility and its associated problems.</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the different causes of enteric dysmotility (myopathy and neuropathy) and their presenting features	CbD, mini-CEX	1
Have a knowledge of scleroderma, amyloid and congenital motor abnormalities of the gut that affect absorption	CbD, mini-CEX	1
Knows the principles of investigation, pain relief and prokinetic drug treatment	CbD, mini-CEX	1,2
Understands bacterial overgrowth and its treatment	CbD, mini-CEX, ESEGH	1
Understands how emotional status can affect gut function	CbD, mini-CEX	1,2
Knows how diabetic complications can affect the gut	CbD, mini-CEX, ESEGH	1
<b>Skills</b>		
Can determine when organic obstruction is occurring	CbD, mini-CEX, TO	1,2
Can understand the principles and interpret the results of gastrointestinal motility investigations (including manometry, transit studies etc) and autonomic function tests	CbD, mini-CEX, TO	1,2
Advises on appropriate prokinetic drugs and analgesics	MSF	1,2,3
Can detect and treat bacterial overgrowth	CbD, mini-CEX	1
Advises on appropriate surgery including bypass procedures	CbD, mini-CEX	1,2,3
<b>Behaviours</b>		
Can relieve symptoms while not causing/risking harm with other medications (e.g. opiates)	MSF	1,2,3,4
Works with the multidisciplinary NST, psychiatrists/psychologists, surgeons and the pain management team	MSF	1,2,3,4
Can give careful explanation of the problems to the patient, carers, friends and family	MSF	1,2,3,4



## Management of Pancreatitis

Managing patients at all stages of acute or chronic pancreatitis.		
Knowledge	Assessment Methods	GMP
Knows the different causes of pancreatitis and know how and when to investigate these	CbD, mini-CEX	1,2
Knows how to assess the severity of acute pancreatitis clinically and radiologically	CbD, mini-CEX, ESEGH	1,2
Knows the advantages and disadvantages of the available routes for giving nutritional support	CbD, mini-CEX, ESEGH	1,2
Recognises the slow nature and sometimes fluctuating pattern of the illness in which the patient often gets much worse before recovering	CbD, mini-CEX	1,2
Knows the time-course and outcome of complications (e.g. infective necrosis, portal vein thrombosis, pseudocysts etc) and their surgical (e.g. debridement), radiological (e.g. drainage of collections) and medical treatments (e.g. octreotide)	CbD, mini-CEX	1,2
Skills		
Can choose when gastric and jejunal feeding can be used and when PN is appropriate	CbD, mini-CEX	1,2
Can determine when an intra-abdominal collection needs draining (in conjunction with the surgical team).	CbD, mini-CEX	1,2
Is able to give appropriate pancreatic enzyme therapy	CbD, mini-CEX	1
Can institute appropriate pain management (in conjunction with the pain team)	MSF	1,2,3,4
Behaviours		
Communicates with the patient, friends and family through a long and serious illness which often gets worse before getting better	MSF	1,2,3,4
Works in a multidisciplinary team that involves the NST, intensivists and surgeons	MSF	1,2,3,4
Can consider all aspects of care including treating endocrine pancreatic dysfunction in conjunction with diabetologists/endocrinologists	MSF	1,2,3,4

## Management of Abdominal Malignancy

Managing patients with primary or secondary abdominal malignancy.		
Knowledge	Assessment Methods	GMP
Knows when nutritional support is appropriate not only to prolong life but also to relieve symptoms (thirst and hunger) and improve the quality of remaining life (e.g. gut obstruction or enterocutaneous fistula)	CbD, mini-CEX, ESEGH	1
Knows the prognosis of different abdominal malignancies (primary and secondary) and their possible treatments.	CbD, mini-CEX	1,2
Appreciates the ethical issues in managing patients with advanced malignancy	CbD, mini-CEX, ESEGH	1
Skills		

Can select patients in whom it is appropriate to give palliative parenteral nutrition	CbD, mini-CEX	1,2,3,4
Assesses the benefits and risks of giving nutritional support	CbD, mini-CEX	1,2,3,4
Can balance the needs of quality of life, analgesia and nutritional support	MSF	1,2,3,4
Can insert a venting gastrostomy tube	DOPS	1,2
Can treat the complications of entero-cutaneous fistula, bowel obstruction and ascites	CbD, mini-CEX	1,2,3,4
<b>Behaviours</b>		
Can work in a multidisciplinary environment that includes the pain and palliative care teams and the oncologists	MSF	1,2,3,4
Discusses the ethical issues involved in prolonging life and to weigh this up against quality of life	MSF	1,2,3,4
Can speak honestly about often sensitive issues with the patient, carers, friends and family	MSF	1,2,3,4

## Chemotherapy and Irradiation

### Managing patients having high dose chemotherapy. Managing the long term effects of irradiation exposure that was given to treat intra-abdominal or pelvic malignancy.

Knowledge	Assessment Methods	GMP
Knows which chemotherapeutic drugs can affect the gut and their duration of action	CbD, mini-CEX	1,2
Knows about the short and long term problems of irradiation damage. Appreciates the progressive nature of irradiation damage	CbD, mini-CEX	1
Understands the immunosuppressed state and the key elements in managing an immunocompromised individual	CbD, mini-CEX	1,2
Understands the gastrointestinal problems of graft versus host disease (GVHD)	CbD, mini-CEX	1
<b>Skills</b>		
Can support the nutrition of a patient who is having high dose chemotherapy	CbD, mini-CEX	1,2
Can choose the appropriate route for giving nutritional support	CbD, mini-CEX	1,2
Is aware of the metabolic consequences of chemotherapy	CbD, mini-CEX	1,2
Can assess when a bowel resection or bypass may be appropriate for a patient with irradiation damage	CbD, mini-CEX	1,2
Can give nutritional support (often PN) to a patient with GVHD	CbD, mini-CEX	1
<b>Behaviours</b>		
Able to counsel patients undergoing chemotherapy or those who have the long-term effects of irradiation damage	MSF	1,2,3,4
Works within a multidisciplinary NST including the oncologists	MSF	1,2,3,4

## Post Gastric Surgery

Managing patient who have had gastric surgery and are undernourished.		
Knowledge	Assessment Methods	GMP
Understands why part or all of the patient's stomach is removed and the altered post-surgical anatomy.	CbD, mini-CEX	1
Understands the problems of a gastro-enterostomy and a Roux-en-y anastomosis	CbD, mini-CEX	1
Has awareness of dumping syndromes	CbD, mini-CEX	1
Knows the various surgical operations performed for obesity (bariatric surgery) and their complications	CbD, mini-CEX	1
Skills		
Can give nutritional advice and choose the appropriate method by which an enteral feeding tube is inserted into the small bowel	CbD, mini-CEX	1,2,3
Can initiate the use of pancreatic enzyme therapy	CbD, mini-CEX	1
Has ability to recognise and treat early and late dumping syndrome	CbD, mini-CEX	1
Behaviours		
Able to help the patient, carers, friends and family understand how the patient can be encouraged to gain weight	MSF	1,2,3,4
Works closely with dieticians and surgical colleagues	MSF	1,2,3,4

## Parenteral Nutrition

Managing parenteral nutrition in hospital and at home.		
Knowledge	Assessment Methods	GMP
Indications: <ul style="list-style-type: none"> <li>Knows when parenteral nutrition should be given in preference to enteral nutrition</li> </ul>	CbD, mini-CEX, ESEGH	1,2
Catheter care: <ul style="list-style-type: none"> <li>Appreciates strict aseptic technique needed to insert and care for parenteral feeding catheters</li> <li>Knows about the different catheter types (including ports)</li> </ul>	CbD, mini-CEX, ESEGH CbD, mini-CEX	1,2 1
Prescription: <ul style="list-style-type: none"> <li>Knows how a parenteral feeding bag is made up including its limitations</li> <li>Understands the components of a feeding beg</li> <li>Understands the issues of compatibility (cracking and creaming etc)</li> </ul>	CbD, mini-CEX, ESEGH CbD, mini-CEX TO	1 1 1
Assessment/monitoring: <ul style="list-style-type: none"> <li>Knows how to assess the nutritional / fluid requirements and prescribe appropriate amounts</li> </ul>	CbD, DOPS, EX	1 1
Complications:		1,2

<ul style="list-style-type: none"> <li>Knows how to diagnose and manage catheter related sepsis, exit site and tunnel infections, central vein thrombosis, abnormal liver function tests (LFT) and blocked catheters</li> </ul>	CbD, mini-CEX	1,2
<ul style="list-style-type: none"> <li>Knows that most LFT abnormalities have causes other than the PN</li> </ul>	CbD, mini-CEX	1,2
<ul style="list-style-type: none"> <li>Knows that a proximal catheter tip is the most common reason for central vein thrombosis</li> </ul>	CbD, mini-CEX	1,2
<b>Outcome:</b>		
<ul style="list-style-type: none"> <li>Appreciates the difficulties of managing parenteral nutrition at home</li> </ul>	CbD, mini-CEX	1,2
<ul style="list-style-type: none"> <li>Knows about the long term problems including venous access, recurrent catheter related sepsis and osteoporosis</li> </ul>	CbD, mini-CEX	1,2
<b>Training:</b>		
<ul style="list-style-type: none"> <li>Appreciates the training programme for establishing a patient on HPN (including funding, connection, disconnection, dressing care)</li> </ul>	TO, MSF	1
<ul style="list-style-type: none"> <li>Be aware of where patients can obtain more information (e.g. PINNT)</li> </ul>	TO, MSF	1
<b>Funding:</b>		
<ul style="list-style-type: none"> <li>Understands how to arrange funding for long-term HPN</li> </ul>	TO, MSF	1
<b>Skills</b>		
Can write PN prescriptions according to a patients needs	CbD, mini-CEX	1,2
Appreciates when PN is necessary and be able to implement it	CbD, mini-CEX	1,2
Can safely insert parenteral feeding lines (PICC and Tunnelled central lines) using the jugular, subclavian and femoral central routes	DOPS	1,2
Institutes appropriate investigations and treatments for all catheter-related complications. This includes venography, thrombolysis and venous stenting for central vein thrombosis	CbD, mini-CEX	1,2
Can access a parenteral feeding line using aseptic technique (to take blood and blood cultures)	DOPS	1,2,4
Can treat catheter related sepsis with an anti-biotic lock technique	CbD, mini-CEX	1,2
Can remove a cuffed feeding line	DOPS	1,2
Can recognise PN associated liver disease and know when to consider a liver (+/- small bowel) transplant	CbD, mini-CEX	1,2,3,4
Coordinates the process for discharging a patient on HPN	MSF	1,2,3,4
<b>Behaviours</b>		
Selects the appropriate route for a PN feeding catheter and manage the feeding and any complications in a competent and caring manner	CbD, mini-CEX	1,2,3,4
Works within a multidisciplinary NST liaising with the surgeons, radiologists, psychiatrists and home care providers as necessary	MSF	1,2,3,4
Discusses the various and often complex issues openly and honestly with the patient, carers, friends and family	MSF	1,2,3,4

## Enteral Nutrition

<b>Managing enteral nutrition in hospital and at home.</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows when patients should have EN (including in the process of weaning off PN)	CbD, mini-CEX, ESEGH	1,2
Understands when EN is not successful or causing problems and PN is more appropriate	CbD, mini-CEX	1,2
Is aware of the problems in inserting enteral feeding tubes into patients with liver disease or previous gastric surgery	CbD, mini-CEX	1,2
Knows when EN is appropriate after gastrointestinal surgery and in patients with intestinal failure	CbD, mini-CEX	1,2
Appreciates the malabsorption factor in patients with a short bowel	CbD, mini-CEX	1
Knows about feed composition and the feed in special circumstances (e.g. osmolality and sodium content in patients with a jejunostomy)	CbD, mini-CEX	1
Appreciates special problems associated with re-feeding	ESEGH, CbD, mini-CEX	1,2
<b>Skills</b>		
Can determine when EN is not appropriate or causing harm	CbD, mini-CEX	1,2
Can insert NJ tubes at the bedside and endoscopically	DOPS	1,2
Able to insert a PEGJ and PEJ	DOPS	1,2
Can monitor for refeeding problems and prevent and treat them in advance	CbD, mini-CEX	1,2
Can choose and adjust the composition of enteral feeds as appropriate	CbD, mini-CEX	1,2
<b>Behaviours</b>		
Exhibits a caring attitude especially to those with learning difficulties, neurological conditions and eating disorders. Be able to care for these patients in the long-term	MSF	1,2,3,4
Works with the multidisciplinary NST and home care providers as necessary	MSF	1,2,3,4
Can discuss the issues honestly with the patient, carers, friends and family	MSF	1,2,3,4

## Eating Disorders

<b>Managing patients who have or may have an eating disorder (e.g. anorexia nervosa)</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the diagnostic features, predisposing factors and consequences (physical, psychological and social) of an eating disorder (e.g. anorexia nervosa)	CbD, mini-CEX, ESEGH	1,2
Knows the physical (especially refeeding) problems and principles of psychological treatment	CbD, mini-CEX	1,2
Knows the associated co-morbidities (e.g. depression, anxiety, obsessive compulsive disorder, laxative abuse, osteoporosis etc)	CbD, mini-CEX	1,2

Knows the legal process for implementing compulsory treatment and know when it is necessary	CbD, mini-CEX	1,2
<b>Skills</b>		
Is able to suspect an atypical eating disorder and seek help from a psychiatric/eating disorders team to help diagnose, investigate and treat it	CbD, mini-CEX	1,2
Can assess the physical problems	CbD, mini-CEX	1,2
Can decide when and what interventional nutritional support is needed	CbD, mini-CEX	1,2,3,4
Can give appropriate vitamin and mineral supplements	CbD, mini-CEX	1
Can monitor nutrient intake	CbD, mini-CEX	1,2
Can detect, in conjunction with a psychiatric/eating disorders team, which patients should be admitted to an eating disorders unit and when a compulsory treatment order is needed.	CbD or mini-CEX, TO	1,2,3,4
<b>Behaviours</b>		
Appreciates that these patients can be very time consuming and difficult to manage but the patient may have a life endangering illness (thus the doctor needs to be compassionate yet firm in managing them)	CbD, mini-CEX	1,2
Works closely with a psychiatric/eating disorders team	CbD	1,2,3,4
Can co-ordinate, in conjunction with the psychiatric/eating disorders team, the whole multidisciplinary team in giving consistent advice to the patient	CbD, MSF	1,2,3,4
Can discuss the issues honestly and sensitively with the patient, carers, friends and family	CbD, PS	1,2,3,4

## Ethical and Legal Issues that Arise in Nutritional Support

<b>Managing the patient without capacity.</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows about the main situations in which legal/ethical issues arise, namely internally feeding a patient with poor cerebral function (stroke, motor neuron disease etc) or refusal to eat (anorexia nervosa or hunger strike), or parenterally feeding a patient who has incurable abdominal cancer	CbD, mini-CEX	1,2
Understands the Mental Health Act and the following terms: <ul style="list-style-type: none"> <li>• Advanced directive</li> <li>• Futile treatment</li> <li>• Capacity</li> <li>• Best interests</li> <li>• Autonomy</li> <li>• Beneficence</li> <li>• Power of attorney</li> <li>• Persistent vegetative state</li> </ul>	CbD, mini-CEX	1,2
Knows when nutritional or fluid treatment can be withheld or withdrawn	CbD, mini-CEX	1,2

Understands how to preserve dignity	CbD, mini-CEX	1,2
<b>Skills</b>		
Can decide when artificial nutritional support and/or fluid should be withheld or with drawn	CbD	1,2,3,4
Can recognise when legal advice should be sought.	CbD	1,2,3
<b>Behaviours</b>		
Remains compassionate at al times and when appropriate does everything possible to allow a dignified death	MSF	1,2,3,4
Can discuss the issues sensitively and honestly with the patient, carers, friends and family	MSF	1,2,3,4

## c) Advanced Endoscopy

### **Advanced Training in Endoscopic Retrograde Cholangio-pancreatography (ERCP) and/or Endoscopic Ultrasound (EUS) for Gastroenterology Trainees**

The core part of this curriculum provides trainees with the knowledge and skills to assess and refer patients for consideration of ERCP and EUS. They will understand the anatomy, physiology, and related pathology, the indications and complications, the relevant co-morbidities, and their impact on likely outcomes of the procedures, and alternative investigations and treatment.

This part of the curriculum will equip trainees to carry out one or both procedures to agreed standards of competence, as well as to provide very detailed assessment, options appraisal, and prognostication resulting from the procedural outcomes. The outcomes listed are over and above those listed under the core outcomes in the endoscopy curriculum.

It is envisaged that this area of specialty training will take place over a year, within one or more related NHS Trusts, who can provide both the clinical opportunities but also expert, trained and effective teachers who can devote sufficient protected time to the training required. It will not be enough that the trainers are experts alone – they will also need to be expert teachers too, at least to have undertaken a Training Endoscopy Trainers course and to be participating in regular teaching evaluations, and ideally to be training on regional training courses.

Whilst it is not thought that experience in the procedures alone for trainees will be adequate to deliver the training to the required standards, in order to provide the sufficient number and variety of advanced training opportunities, an endoscopy unit will need to be large, or to work in collaboration with local quality assured units to support trainees.

The curriculum will include:-

1. Extended knowledge of the anatomy, physiology, and pathology of the relevant areas
2. Thorough clinical assessment of patients potentially suitable for the procedures
3. Triage and prioritisation of patients for the procedures
4. Thorough and detailed information and realistic consenting of patients, including relative and absolute risks and benefits, and alternatives
5. Preparation and care of patients before, during, and post-procedure to minimise risks and complications
6. Skilled instrument handling and accessory use to enable safe and effective procedures, meeting JAG standards of competence
7. Diagnostic and management skills using the imaging modalities available – ultrasonic, radiographic, and endoscopic images.
8. Advanced team-working skills to ensure safe and effective practice, and to ensure patients benefit from multi-disciplinary team expertise, including the limitations of the procedures and appropriate referral of patients

The specialised training will build on the experience provided in core training, both generally and especially in endoscopy, where many generic issues, including knowledge and skills in consenting, safe sedation, anatomy, pathology, diathermy, are re-visited and developed further. Other aspects, such as quality assurance, audit,



and all behaviours very much apply here as - notably with ERCP - there is an unparalleled morbidity and mortality rate, compared with all other aspects of investigational and therapeutic gastroenterological practice.

## Endoscopic Ultrasound (EUS)

To provide a syllabus and skills learning programme to ensure the acquisition of sufficient knowledge and skill to enable a gastroenterologist to provide an EUS service in a specialist capacity

<b>To ensure knowledge of the principles and details of safe endoscopy practise in the area of EUS and associated therapeutic procedures</b>		
<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
Knows the detailed anatomy of oesophageal layers, the pancreas, the ano-rectal region, their anatomical relations and lymph node drainage; staging classification and the pathology of oesophageal, anorectal malignancies and pancreatic disease;	ESEGH, CbD	1,2
Knows the indications and contra-indications for EUS, node biopsy, drainage of pancreatic pseudocysts and other procedures;	ESEGH, CbD	1,2
Understands the special characteristics of EUS scopes, controls, accessories and devices	ESEGH, CbD	1,2
Knows the risks and complications of EUS, the associated interventional procedures, their assessment, their management, risk reduction strategies and the alternatives to EUS	ESEGH, CbD	1,2
Knows the quality standards in EUS	ESEGH, CbD	1,2
<b>Skills</b>		
Demonstrates skill in:	CbD, DOPS, MSF	1,3
<ul style="list-style-type: none"> <li>• Assessing the appropriateness and timing of patients for EUS and associated procedures</li> <li>• Appropriate sedation and monitoring techniques</li> <li>• Specific intubation techniques and EUS scope handling for both forward and side viewing scopes</li> <li>• Interventional accessory and device handling</li> <li>• Assessment of pathology at EUS</li> <li>• Management of aftercare</li> </ul>		
<b>Behaviours</b>		
Can discuss, explain, consent, and break bad news with sensitivity patients undergoing EUS	MSF.	1
Fully participates in the multidisciplinary team, and work effectively within the team to provide safe and high quality care	MSF	1

## ERCP

**To ensure knowledge of the principles and details of safe endoscopy practise in the area of ERCP and associated therapeutic procedures**

<b>Knowledge</b>	<b>Assessment Methods</b>	<b>GMP</b>
<p>Knows:</p> <ul style="list-style-type: none"> <li>• The anatomy of the pancreas, bile ducts system, their lymphatic drainage, anatomic relationships and the implications for ERCP</li> <li>• The pathology of the bile ducts and pancreas</li> <li>• The indications and contraindications for ERCP</li> <li>• The risks and complications of ERCP, the associated interventions, their management and strategies for their avoidance</li> <li>• Quality standards for ERCP and procedures</li> </ul>	ESEGH	1,2
<b>Skills</b>		
<p>Demonstrates skill in;</p> <ul style="list-style-type: none"> <li>• Assessing the appropriateness and timing of ERCP and associated procedures and alternatives</li> <li>• The use of appropriate sedation, analgesia, anaesthetics and other drugs required for safe procedures</li> <li>• Safe endoscope and accessory handling skills</li> <li>• recognition and assessment of pathology</li> <li>• Appropriate interventional procedures</li> <li>• Management of after care</li> </ul>	CbD, DOPS	1,3
<b>Behaviours</b>		
Undertakes explanation, consent, and breaking bad news realistically and honestly with patients.	mini-CEX, CbD, MSF.	1
Fully participates in quality assurance processes related to ERCP, and work effectively within the team to provide safe and high quality care	Audit, MSF	1

## 4 Learning and Teaching

### 4.1 The Training Programme

The organisation and delivery of postgraduate training is the statutory responsibility of the General Medical Council (GMC), which devolves responsibility for the local organisation and delivery of training to the deaneries. Each deanery oversees a "School of Medicine" which is comprised of the regional Specialty Training Committees (STC's) in each medical specialty. Responsibility for the organisation and delivery of specialty training in gastroenterology in each deanery is, therefore, the remit of the regional gastroenterology STC overseen by the deanery. Each STC has a Training Programme Director who coordinates the training programme in the specialty. The training programme will be organised by deanery specialty training committees following submission to JRCPTB who will seek approval from GMC. It is acknowledged that deaneries may provide their formal education in different formats including monthly training days or weekly half days. Endoscopy training likewise may include training courses out of the deanery

Although this curriculum is competency based, the duration of training must meet the European minimum of 4 (four) years for training in a single designated specialty adjusted accordingly for flexible training (EU directive 2005/36/EEC). Most trainees will enrol in a dual specialty programme and will be in training for a minimum of 5 years. Within the gastroenterology training programme it will also be possible to undertake advanced training in nutrition, inflammatory bowel disease and specialised endoscopy. It will also be possible to gain sub-specialist certification in hepatology by following the separate curriculum.

The following combinations of certification may be acquired:

Gastroenterology and General (Internal) Medicine	5 years
Gastroenterology and General (Internal) Medicine and Hepatology	5 years
Gastroenterology alone	4 years
Gastroenterology and Hepatology	4 years

It is envisaged that the majority of trainees will follow the first pathway

Trainees who wish to achieve a CCT in General (Internal) Medicine must have applied for and successfully entered a training programme which was advertised openly as a dual training programme. This programme will need to achieve the competencies as described in both the gastroenterology and GIM (Acute) curricula and there must be jointly agreed assessments (proposed by both SACs and approved by GMC). Postgraduate deans wishing to advertise such programmes should ensure that they meet the requirements of both SACs.

Training will normally take place in a range of district general hospitals and teaching hospitals for a duration of 6 or 12 months at each institution. Trainees will be expected to spend a minimum of 24 months in district general hospitals (12 months for lecturers). There will be at least two consultant supervisors within the specialty at any training unit and a minimum of one consultant gastroenterologist per trainee. Progression through the programme will be determined with the aid of the decision grid (see section 5.5 ARCP decision aid). The final award of a CCT will be dependent

on the achievement of competencies as evidenced by the successful completion of assessments set out in the curriculum.

The sequence of training should ensure appropriate progression in experience and responsibility. The training to be provided at each training site is defined to ensure that, during the programme, the entire curriculum is covered and also that unnecessary duplication and educationally unrewarding experiences are avoided. However, the sequence of training should ideally be flexible enough to allow the trainee to develop a special interest.

All training in gastroenterology should be conducted in institutions with appropriate standards of clinical governance and which meet the relevant Health and Safety standards for clinical areas. Training placements must comply with the European Working Time Directive for junior doctors.

Training posts must provide the necessary clinical exposure but also evidence that the required supervision and assessments can be achieved.

### **Acting up as a consultant (AUC)**

“Acting up” provides doctors in training coming towards the end of their training with the experience of navigating the transition from junior doctor to consultant while maintaining an element of supervision.

Although acting up often fulfills a genuine service requirement, it is not the same as being a locum consultant. Doctors in training acting up will be carrying out a consultant’s tasks but with the understanding that they will have a named supervisor at the hosting hospital and that the designated supervisor will always be available for support, including out of hours or during on-call work. Doctors in training will need to follow the rules laid down by the Deanery / LETB within which they work and also follow the JRCPTB rules which can be on the website ([www.jrcptb.org.uk](http://www.jrcptb.org.uk)).

## **4.2 Teaching and Learning Methods**

The curriculum will be delivered through a variety of learning experiences. Trainees will learn from practice, clinical skills appropriate to their level of training and to their attachment within the department.

Trainees will achieve the competencies described in the curriculum through a variety of learning methods. There will be a balance of different modes of learning from formal teaching programmes to experiential learning ‘on the job’. The proportion of time allocated to different learning methods may vary depending on the nature of the attachment within a rotation.

This section identifies the types of situations in which a trainee will learn.

**Learning with Peers** - There are many opportunities for trainees to learn with their peers. Local postgraduate teaching opportunities allow trainees of varied levels of experience to come together for small group sessions. Examination preparation encourages the formation of self-help groups and learning sets.

**Work-Based Experiential Learning** - The content of work-based experiential learning is decided by the local faculty for education but includes active participation in:

- Medical clinics including specialty clinics. After initial induction, trainees will review patients in outpatient clinics, under direct supervision. The degree of responsibility taken by the trainee will increase as competency increases. As experience and clinical competence increase trainees will assess 'new' and 'review' patients and present their findings to their clinical supervisor.
- Endoscopy lists including diagnostic/therapeutic gastroscopy. Most trainees are likely to wish to train in flexible sigmoidoscopy colonoscopy and adequate resources must be in place to allow the development of the necessary competencies. For those who wish to pursue more specialised endoscopy training, programmes in advanced techniques in therapeutic colonoscopy, ERCP and EUS should be available as part of a designated training programme. In all endoscopic modalities training should be undertaken in a supervised environment conducive to learning whereby trainees can develop competencies where the safety of the patient is of paramount importance. Trainees will be expected to attend courses in basic endoscopy. Those trainees wishing to train in colonoscopy will be expected to attend a basic and advanced colonoscopy course.
- Specialty-specific takes
- Post-take consultant ward-rounds
- Personal ward rounds and provision of ongoing clinical care on specialist medical ward attachments. Every patient seen, on the ward or in out-patients, provides a learning opportunity, which will be enhanced by following the patient through the course of their illness: the experience of the evolution of patients' problems over time is a critical part both of the diagnostic process as well as management. Patients seen should provide the basis for critical reading and reflection of clinical problems.
- Consultant-led ward rounds. Every time a trainee observes another doctor, consultant or fellow trainee, seeing a patient or their relatives there is an opportunity for learning. Ward rounds, including those post-take, should be led by a consultant and include feedback on clinical and decision-making skills.
- Multi-disciplinary team meetings. There are many situations where clinical problems are discussed with clinicians in other disciplines. These provide excellent opportunities for observation of clinical reasoning. Such meetings include
  - X-Ray meetings
  - Histology meetings
  - Site specific cancer meetings
  - Joint surgical meetings
  - IBD multi disciplinary meetings
  - Nutrition rounds

Trainees have supervised responsibility for the care of in-patients. This includes day-to-day review of clinical conditions, note keeping, and the initial management of the acutely ill patient with referral to and liaison with clinical colleagues as necessary. The degree of responsibility taken by the trainee will increase as competency increases. There should be appropriate levels of clinical supervision throughout training with increasing clinical independence and responsibility as learning outcomes are achieved (see Section 5: Feedback and Supervision).

**Formal Postgraduate Teaching** – The content of these sessions are determined by the local faculty of medical education and will be based on the curriculum. There are many opportunities throughout the year for formal teaching in the local postgraduate teaching sessions and at regional, national and international meetings. Many of these are organised by the Royal Colleges of Physicians.

Suggested activities include:

- A programme of formal bleep-free regular teaching sessions to cohorts of trainees (e.g. a weekly core training hour of teaching within a Trust)
  - Case presentations
  - Journal clubs
  - Research and audit projects
  - Lectures and small group teaching
  - Grand Rounds
  - Clinical skills demonstrations and teaching
  - Critical appraisal and evidence based medicine and journal clubs
  - Joint specialty meetings
  - Attendance at training programmes organised on a deanery or regional basis, which are designed to cover aspects of the training programme outlined in this curriculum.
1. Management: There should be opportunities for trainees to attend appropriate management meetings (e.g. service review, departmental meetings and Directorate meetings)
  2. Training in the management of acute gastrointestinal bleeding and its endoscopic management should be available in the rotation for all trainees
  3. The post should be used with other posts in the rotation to ensure that a trainee achieves appropriate training in all areas of gastroenterology and should include at least 1 year in a DGH and including 6 months in a specialised liver post.

**Independent Self-Directed Learning** -Trainees will use this time in a variety of ways depending upon their stage of learning. Suggested activities include:

- Reading, including web-based material
- Maintenance of personal portfolio (self-assessment, reflective learning, personal development plan)
- Audit and research projects
- Reading journals
- Achieving personal learning goals beyond the essential, core curriculum

**Formal Study Courses** - Time to be made available for formal courses is encouraged, subject to local conditions of service. Examples of such courses include

- Basic upper GI endoscopy (mandatory for all trainees)
- Advanced upper GI endoscopy
- Basic colonoscopy (mandatory if training in this procedure)
- Advanced colonoscopy
- Nutrition
- Hepatology
- Management
- Communication
- Teaching the Teachers (mandatory for all trainees)

Some courses may be offered by local deaneries as part of a regional generic teaching programme.

In addition trainees should be encouraged to attend national and international specialty meetings.

The following is a checklist of good practice to help Programme Directors ensure that the above learning experiences are available on individual training sites

1. For continuity of supervision there should be at least two consultant gastroenterologists based at each site of training
2. There must be no more than one SpR per trainer
3. The timetable must include scheduled outpatient sessions (minimum two; maximum three) and always supervised
4. Ward rounds: A minimum of one trainer led round and one StR led ward round per week (Max: three ward round sessions)
5. Endoscopy: At least two sessions per week supervised to the appropriate level and containing the appropriate case mix (dependent upon the trainees' needs). No more than three sessions should be expected unless the trainee is participating in an advanced endoscopy training programme.
6. One bleep free session per week to enable trainees to attend regional training days, carry out audit projects/research and private study.
7. Multidisciplinary Meetings: To include X-ray, surgery, oncology and histology, with review of both upper and lower GI cases. Upper GI to include hepatobiliary disease
8. Weekly Grand Round
9. Audit - Included in the timetable.
10. Induction: There should be an induction programme on arrival at a unit which should include information on unit guidelines and protocols preferably in electronic format
11. Specified regular appraisal in the job description

### **4.3 Research**

Although not a mandatory component of this training programme, trainees in gastroenterology are strongly encouraged to consider undertaking a programme of research.

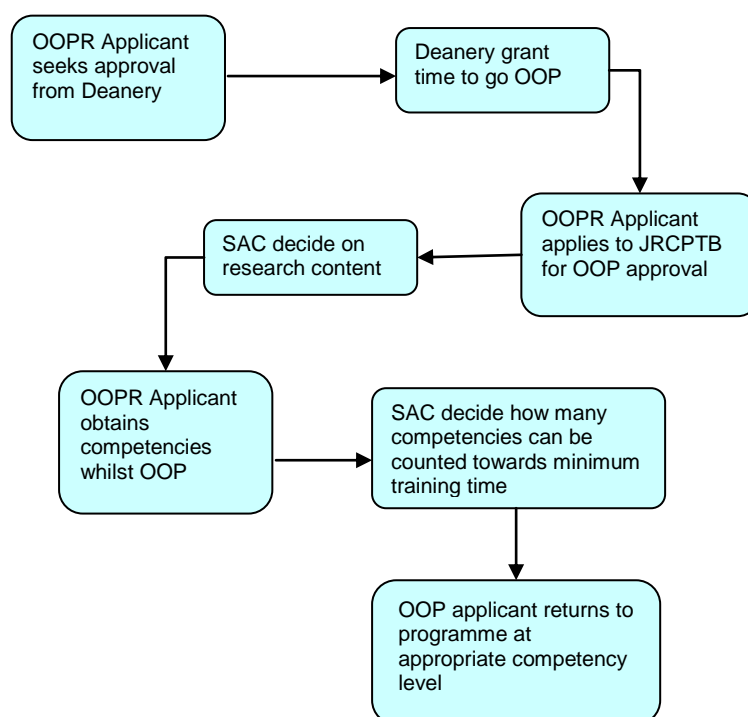
Trainees who wish to acquire research competencies, in addition to those specified in their specialty curriculum, may undertake a research project as an ideal way of obtaining those competencies. For those in specialty training, one option to be considered is that of taking time out of programme to complete a specified project or research degree. Applications to research bodies, the deanery (via an OOPR form) and the JRCPTB (via a Research Application Form) are necessary steps, which are the responsibility of the trainee. The JRCPTB Research Application Form can be accessed via the JRCPTB website. It requires an estimate of the competencies that will be achieved and, once completed, it should be returned to JRCPTB together with a job description and an up to date CV. The JRCPTB will submit applications to the relevant SACs for review of the research content including an indicative assessment of the amount of clinical credit (competence acquisition) which might be achieved. This is likely to be influenced by the nature of the research (eg entirely laboratory-based or strong clinical commitment), as well as duration (eg 12 month Masters, 2-year MD, 3-Year PhD). On approval by the SAC, the JRCPTB will advise the trainee and the deanery of the decision. The deanery will make an application to the GMC



for approval of the out of programme research. All applications for out of programme research must be prospectively approved.

Upon completion of the research period the competencies achieved will be agreed by the OOP Supervisor, Educational Supervisor and communicated to the SAC, accessing the facilities available on the JRCPTB ePortfolio. The competencies achieved will determine the trainee's position on return to programme; for example if an ST3 trainee obtains all ST4 competencies then 12 months will be recognised towards the minimum training time and the trainee will return to the programme at ST5. This would be corroborated by the subsequent ARCP.

This process is shown in the diagram below:



Funding will need to be identified for the duration of the research period. Trainees need not count research experience or its clinical component towards a CCT programme but must decide whether or not they wish it to be counted on application to the deanery and the JRCPTB.

A maximum period of 3 years out of programme is allowed and the SACs will recognise up to 12 months towards the minimum training times. As a general rule, one clinic or endoscopy session per week will equate to one month of training recognition over a 12 month period.

### 4.3 Academic Training

For those contemplating an academic career path, there are now well-defined posts at all levels in the Integrated Academic Training Pathway (IATP) involving the National Institute for Health Research (NIHR) and the Academy of Medical Sciences (AMS). For full details see <http://www.nccrcd.nhs.uk/intetacatrain> and <http://www.academicmedicine.ac.uk/uploads/A-pocket-guide.pdf>. Academic trainees may wish to focus on education or research and are united by the target of a consultant-level post in a university and/or teaching hospital, typically starting as a senior lecturer and aiming to progress to readership and professor. A postgraduate

degree will usually be essential (see “out of programme experience”) and academic mentorship is advised (see section 6.1). Academic competencies have been defined by the JRCPTB in association with AMS and the Colleges and modes of assessment have been incorporated in the latest edition of the Gold Guide (section 7, see <http://www.jrcptb.org.uk/forms/Documents/GoldGuide2009.pdf>).

Academic integrated pathways to CCT are a) considered fulltime CCTs as the default position and b) are run through in nature. The academic programmes are CCT programmes and the indicative time academic trainees to achieve the CCT is the same as the time set for non-academic trainees. If a trainee fails to achieve all the required competencies within the notional time period for the programme, this would be considered at the ARCP, and recommendations to allow completion of clinical training would be made (assuming other progress to be satisfactory). An academic trainee working in an entirely laboratory-based project would be likely to require additional clinical training, whereas a trainee whose project is strongly clinically oriented may complete within the “normal” time (see the guidelines for monitoring training and progress)

<http://www.academicmedicine.ac.uk/careersacademicmedicine.aspx>. Extension of a CCT date will be in proportion depending upon the nature of the research and will ensure full capture of the specialty outcomes set down by the Royal College and approved by GMC.

All applications for research must be prospectively approved by the SAC and the regulator, see [www.jrcptb.org.uk](http://www.jrcptb.org.uk) for details of the process.

## 5 Assessment

### 5.1 The Assessment System

The purpose of the assessment system is to:

- enhance learning by providing formative assessment, enabling trainees to receive immediate feedback, measure their own performance and identify areas for development;
- drive learning and enhance the training process by making it clear what is required of trainees and motivating them to ensure they receive suitable training and experience;
- provide robust, summative evidence that trainees are meeting the curriculum standards during the training programme;
- ensure trainees are acquiring competencies within the domains of Good Medical Practice;
- assess trainees’ actual performance in the workplace;
- ensure that trainees possess the essential underlying knowledge required for their specialty;
- inform the Annual Review of Competence Progression (ARCP), identifying any requirements for targeted or additional training where necessary and facilitating decisions regarding progression through the training programme;
- identify trainees who should be advised to consider changes of career direction.

Workplace-based assessments will take place throughout the training programme to allow trainees to continually gather evidence of learning and to provide trainees with formative feedback. They are not individually summative but overall outcomes from a number of such assessments provide evidence for summative decision making. The

number and range of these will ensure a reliable assessment of the training relevant to their stage of training and achieve coverage of the curriculum.

## 5.2 Joint Advisory Group of Gastrointestinal Endoscopy (JAG)

The Joint Advisory Group on Gastrointestinal Endoscopy (JAG) was established in order to advise on standards for training of endoscopists. The multi-disciplinary composition of this body, which has representation from the Royal Colleges of Physicians, Surgeons, Radiologists, Paediatricians (and indeed several other interested parties), reflects the variety of specialists who both train in as well as undertake endoscopy. The role of JAG has evolved since the introduction of the National Bowel Cancer Screening Programme into a body that accredits both the performance of individual endoscopists and endoscopy units but it has not lost its basic remit to advise on standard setting for trainees.

With the most substantial input being from medical gastroenterologists, recommendations from JAG have evolved over the past 10 years. JAG has suggested that all those training in endoscopy should attend a JAG-approved skills course. They have produced a series of DOPS forms specifically to assess formatively (and ultimately in a summative manner) the development of the trainee. They have suggested indicative numbers of procedures to be performed as well as defined a level of competence when a trainee can apply for a certificate of competence in specific modalities of endoscopy. Both the broad concept and the detail have been importantly influenced by significant input from the SAC in Gastroenterology - particularly to ensure that aspirational standards are indeed deliverable.

In essence, JAG advises and the SAC decides. The SAC have accepted all the advice from JAG on training and, in the 2010 curriculum, have agreed that we should specify that trainees attain a JAG certificate in each modality of endoscopy that they wish to pursue. However, each recommendation from JAG is thoroughly discussed at the SAC. The chair of JAG is a full member of the SAC (and this arrangement is reciprocated).

## 5.3 Assessment Blueprint

In the syllabus the "Assessment Methods" shown are those that are appropriate as **possible** methods that could be used to assess each competency. It is not expected that all competencies will be assessed and that where they are assessed not every method will be used. The ARCP tool will be used to demonstrate that an appropriate number of assessments have taken place covering the different domains of the curriculum.

The blueprint is available to all trainees via the ePortfolio. The trainers will also have access to the ePortfolio and will have access to web-based learning to familiarise themselves with the blueprint.

## 5.4 Assessment methods

The following assessment methods are used in the integrated assessment system:

### Examinations and Certificates

- The European Specialty Examination in Gastroenterology and Hepatology (ESEGH) – *previously known as the Specialty Certificate Examination (SCE)*

- The Diploma of MRCP (UK) (Gastroenterology)
- Certificate of successful training in Ionising Radiation (Medical Exposure) Regulations 2000 (IRMER)
- Advanced Life Support Certificate (ALS)

The Federation of Royal Colleges of Physicians of the UK, in association with the British Society of Gastroenterology, has developed the European Specialty Examination in Gastroenterology and Hepatology (ESEGH). The ESEGH was previously known as the Specialty Certificate Examination in Gastroenterology and Hepatology (up until 2017). The aim of this examination is to assess a trainee's knowledge and understanding of the clinical sciences relevant to specialist medical practice and of common or important disorders to a level appropriate for a newly appointed consultant. The ESEGH or SCE is a prerequisite for attainment of the CCT.

Information about the ESEGH, including guidance for candidates, is available on the MRCP (UK) website [www.mrcpuk.org](http://www.mrcpuk.org)

Trainees who have gained the ESEGH and who are recommended for a CCT will be entitled to apply for the post nominal MRCP(UK) (Gastroenterology).

### **Workplace-Based Assessments (WPBAs)**

- Multi-Source Feedback (MSF)
- mini-Clinical Evaluation Exercise (mini-CEX)
- Direct Observation of Procedural Skills (DOPS)
- Case-Based Discussion (CbD)
- Patient Survey (PS)
- Acute Care Assessment Tool (ACAT)
- Audit Assessment (AA)
- Teaching Observation (TO)

These methods are described briefly below. More information about these methods including guidance for trainees and assessors is available in the ePortfolio and on the JRCPTB website [www.jrcptb.org.uk](http://www.jrcptb.org.uk). Workplace-based assessments should be recorded in the trainee's ePortfolio. The workplace-based assessment methods include feedback opportunities as an integral part of the assessment process, this is explained in the guidance notes provided for the techniques.

The Joint Advisory Group on Gastrointestinal Endoscopy (JAG) has developed the DOPS assessments for all endoscopic procedures including both summative and formative assessment tools. These have been accepted by the SAC as the means of demonstrating endoscopic competence and maintenance of skills for trainees in gastroenterology and allied specialties who receive endoscopic training. More information is available on the JAG website <http://www.thejag.org.uk>

### **Multisource Feedback (MSF)**

This tool is a method of assessing generic skills such as communication, leadership, team working, reliability etc, across the domains of Good Medical Practice. This provides objective systematic collection and feedback of performance data on a trainee, derived from a number of colleagues. 'Raters' are individuals with whom the trainee works, and includes doctors, administration staff, and other allied professionals. The trainee will not see the individual responses by raters, feedback is given to the trainee by the Educational Supervisor.

### **mini-Clinical Evaluation Exercise (mini-CEX)**

This tool evaluates a clinical encounter with a patient to provide an indication of competence in skills essential for good clinical care such as history taking, examination and clinical reasoning. The trainee receives immediate feedback to aid learning. The mini-CEX can be used at any time and in any setting when there is a trainee and patient interaction and an assessor is available.

### **Direct Observation of Procedural Skills (DOPS)**

A DOPS is an assessment tool designed to assess the performance of a trainee in undertaking a practical procedure, against a structured checklist. The trainee receives immediate feedback to identify strengths and areas for development.

### **Case based Discussion (CbD)**

The CbD assesses the performance of a trainee in their management of a patient to provide an indication of competence in areas such as clinical reasoning, decision-making and application of medical knowledge in relation to patient care. It also serves as a method to document conversations about, and presentations of, cases by trainees. The CbD should include discussion about a written record (such as written case notes, out-patient letter, discharge summary). A typical encounter might be when presenting newly referred patients in the out-patient department.

### **Acute Care Assessment Tool (ACAT)**

The ACAT is designed to assess and facilitate feedback on a doctor's performance during their practice on the Acute Medical Take. Any doctor who has been responsible for the supervision of the Acute Medical Take can be the assessor for an ACAT.

### **Patient Survey (PS)**

Patient Survey address issues, including behaviour of the doctor and effectiveness of the consultation, which are important to patients. It is intended to assess the trainee's performance in areas such as interpersonal skills, communication skills and professionalism by concentrating solely on their performance during one consultation.

### **Audit Assessment Tool (AA)**

The Audit Assessment Tool is designed to assess a trainee's competence in completing an audit. The Audit Assessment can be based on review of audit documentation OR on a presentation of the audit at a meeting. If possible the trainee should be assessed on the same audit by more than one assessor.

### **Teaching Observation (TO)**

The Teaching Observation form is designed to provide structured, formative feedback to trainees on their competence at teaching. The Teaching Observation can be based on any instance of formalised teaching by the trainee which has been observed by the assessor. The process should be trainee-led (identifying appropriate teaching sessions and assessors).

## **5.5 Decisions on progress (ARCP)**

The Annual Review of Competence Progression (ARCP) is the formal method by which a trainee's progression through her/his training programme is monitored and recorded. ARCP is not an assessment – it is the review of evidence of training and assessment. The ARCP process is described in A Reference Guide for Postgraduate Specialty Training in the UK (the "Gold Guide" – available from [www.mmc.nhs.uk](http://www.mmc.nhs.uk)).

Deaneries are responsible for organising and conducting ARCPs. The evidence to be reviewed by ARCP panels should be collected in the trainee's ePortfolio.

As a precursor to ARCPs, JRCPTB strongly recommend that trainees have an informal ePortfolio review either with their educational supervisor or arranged by the local school of medicine. These provide opportunities for early detection of trainees who are failing to gather the required evidence for ARCP.

The ARCP Decision Aid is included in section 5.5, giving details of the evidence required of trainees for submission to the ARCP panels (ARCP decision aid for hepatology is available in the sub-specialty curriculum and on the JRCPTB website).

## 5.6 ARCP Decision Aid

Blueprint Sections	Assessment	ST3	ST4	ST5	ST6	ST7
	<b>External</b>					
	ESEGH or SCE		Specialist Exam <sup>a</sup>			
	<b>Workplace Based Assessments</b>					
<b>Common Competencies</b>	mini-CEX <sup>b</sup> / CbD <sup>b</sup>					
	Competency Progression <sup>c</sup>	30%	50%	80%	90%	100%
<b>Basic and Applied Science</b>	mini-CEX <sup>b</sup> / CbD <sup>b</sup>					
	Competency Progression <sup>c</sup>	30%	50%	80%	90%	100%
<b>Upper GI tract disorders</b>	mini-CEX <sup>b</sup> / CbD <sup>b</sup>					
	Competency Progression <sup>c</sup>	30%	50%	80%	90%	100%
<b>Intestinal disorders</b>	mini-CEX <sup>b</sup> / CbD <sup>b</sup>					
	Competency Progression <sup>c</sup>	30%	50%	80%	90%	100%
<b>Hepatology</b>	mini-CEX <sup>b</sup> / CbD <sup>b</sup>	3 mini-CEX, and 6 CbD				
	Competency Progression <sup>c</sup>	30%	50%	80%	90%	100%
<b>Nutrition</b>	mini-CEX <sup>h</sup> /CbD <sup>h</sup> /DOPs	3 mini-CEX, 3 DOP's and 6 CbD				

<b>Total mini-CEX / CbD per year</b>		6	6	6	6	6
<b>Endoscopy</b>	Formative –DOPS <sup>d</sup> Summative-DOPS <sup>d</sup>	Formative x 10 in each modality	F-DOPS; S-DOPS	F-DOPS; S-DOPS	F-DOPS; S-DOPS	F-DOPS; S-DOPS
	DOPS <sup>d</sup>	2	2	2	2	2
<b>Generic skills</b>	MSF <sup>e</sup>	Satisfactory		Satisfactory		
	Audit assessment <sup>f</sup>	1	1	1	1	1
	Patient survey <sup>g</sup>		Satisfactory		Satisfactory	
	Supervisors report adequate Y/N					

Notes:

- a) Specialist Exam: SCE renamed ESEGH from 2018. Can be attempted in ST4 onwards, must be achieved for attainment of CCT.
- b) Six assessments in total (mini-CEX; CbD) per year to cover requirements, to be guided by the core outcomes blueprint grid. One assessment in each major domain 1-5 covered during placement, with endoscopic procedures assessed more frequently. If progression is inadequate as evidenced by WBA's and supervisor report then ARCP outcome 2 or 3.
- c) Indication of percentage of curriculum covered. Will help to identify gaps in training in particular nutrition / hepatology where experience may be focused into a specific training period.
- d) Endoscopy: should have a formal formative DOPS x 10 in all procedures being practiced each year (since all procedures will be directly supervised this is easily accomplished). Summative DOPS for JAG accreditation can be taken when appropriate. Other procedures should be assessed by a total of DOPS x 2 annually.
- e) MSF should be carried out at end of years 1, 3, and as required. If there are no concerns, two MSF's over the specialty training would be satisfactory. If there are areas for improvement, there is the option to add in further MSF's as necessary.
- f) There should be evidence of audit undertaken on an annual basis, which has been assessed by the ES.
- g) A patient survey should be carried out during years 2, 4, and as required. If there are no concerns, two Patient Surveys over the period of specialty training would be satisfactory.



## Advanced Specialist areas

### 1. Inflammatory bowel disease

Blueprint section	Assessment	Induction <sup>1</sup>	Month 6	Month 12
<b>Principles</b>	Specialist Exam <sup>2</sup> , mini-CEX			
<b>Diagnosis</b>	Specialist Exam, CbD			
<b>Management Routine Surgical Biological</b>	Modified ACAT, CbD, mini-CEX, log book			
<b>Team working</b>	MSF <sup>3</sup>			
<b>Complex disease</b>	CbD, log book			
<b>Disease in pregnancy</b>	Specialist Exam, mini-CEX, CbD,			
<b>Nutrition in IBD</b>	Specialist Exam, mini-CEX, CbD, log book			
<b>IBD in adolescence</b>	Specialist Exam, mini-CEX, CbD			
<b>Competency progression<sup>4</sup></b>				
<b>Total assessments required mini-CEX / CbD</b>			5	10
<b>Colonoscopy in patients with IBD</b>	DOPS		Log book >30	Log book >60
<b>Audit <sup>5</sup></b>				

<sup>1</sup> Assessments involving IBD cases should be reviewed on commencement of Advanced Specialist training

<sup>2</sup> Specialist exam: SCE renamed ESEGH from 2018

<sup>3</sup> MSF undertaken between months 4 and 8 using members of MDT and supervisors

<sup>4</sup> Review of evidence produced suggesting satisfactory progression (Y/N/ AR action required)

<sup>5</sup> Evidence of audit involvement should be assessed at month 6 for inception and month 12 for completion

It is strongly advised that a logbook is kept recording all cases seen in clinic / on wards for review during advanced specialist training.

## 2. Nutrition

Blueprint section	Assessment	Induction <sup>1</sup>	Month 6 <sup>3</sup>	Month 12
Enteral nutrition	CbD, mini-CEX,			
Parenteral nutrition	CbD, mini-CEX			
Intestinal failure-general	CbD, mini-CEX			
Short bowel -IBD -ischaemia -jejunostomy/high output stoma -jejunum in continuity with colon	CbD, mini-CEX,			
	MSF <sup>2</sup>			
pancreatitis	CbD			
Post-op. complications/management	CbD, mini-CEX			
Enteric dysmotility	CbD, mini-CEX			
Eating disorders	CbD, mini-CEX			
Abdominal malignancy/chemo-radiotherapy	CbD, mini-CEX			
Ethical/legal issues	CbD			
Total assessments required mini-CEX / CbD			8	16
Insertion and removal of parenteral feeding lines	DOPS		8 (logbook)	16 (logbook)
Audit <sup>4</sup>				

<sup>1</sup> Assessments involving nutrition cases should be reviewed on commencement of advanced specialist training

<sup>2</sup> MSF undertaken between months 4 and 8 using members of MDT and supervisors

<sup>3</sup> Review of evidence produced suggesting satisfactory progression (Y/N/ AR action required)

<sup>4</sup> Evidence of audit involvement should be assessed at month 6 for inception and month 12 for completion

It is strongly advised that a log book is kept recording all cases seen in clinic / on wards and procedures performed for review through advanced specialist training

### 3. Advanced Endoscopy

Blueprint section	Assessment	Induction <sup>1</sup>	Month 6	Month 12
<b>Endoscopic ultrasound</b>	DOPS, CbD, MSF	Accredited in diagnostic upper gastrointestinal endoscopy and preferably flexible sigmoidoscopy prior to training	cancers of oesophagus, stomach or rectum, >25; sub-epithelial lesions, >15; pancreatico-biliary, >25 and FNA, >15 (50% solid pancreatic lesions); >20 DOPS luminal, > 10 subepithelial; > 20 pancreatico-biliary; 10 CbD; 1 MSF	cancers of oesophagus, stomach or rectum, 75; sub-epithelial lesions, 40; pancreatico-biliary, 75 and FNA, 50 (50% solid pancreatic lesions); >40 DOPS luminal, > 20 subepithelial; > 40 pancreatico-biliary; 20 CbD
<b>ERCP</b>	DOPS, CbD, MSF	> 20 procedures; 7 DOPS	>120 procedures; 50 DOPS; 10 CbD; 1 MSF	>250 procedures; 100 DOPS; 20 CbD

<sup>1</sup> Sum of relevant assessments undertaken prior to advanced specialist training.

Completion of this period of training does not necessarily confirm eligibility to practice in this specialist area independently

## **5.7 Penultimate Year Assessment (PYA)**

The penultimate ARCP prior to the anticipated CCT date will include an external assessor from outside the training programme. JRCPTB and the deanery will coordinate the appointment of this assessor. While the ARCP will be a review of evidence, the PYA will include a face-to-face component.

## **5.8 Complaints and Appeals**

The MRCP (UK) office has complaints procedures and appeals regulations documented in its website which apply to all examinations run by the Royal Colleges of Physicians.

All workplace-based assessment methods incorporate direct feedback from the assessor to the trainee and the opportunity to discuss the outcome. If a trainee has a complaint about the outcome from a specific assessment this is their first opportunity to raise it.

Appeals against decisions concerning in-year assessments will be handled at deanery level and deaneries are responsible for setting up and reviewing suitable processes. If a formal complaint about assessment is to be pursued this should be referred in the first instance to the chair of the Specialty Training Committee who is accountable to the regional deanery. Continuing concerns should be referred to the Associate Dean.

# **6 Supervision and feedback**

This section of the curriculum describes how trainees will be supervised, and how they will receive feedback on performance.

## **6.1 Supervision**

All elements of work in training posts must be supervised with the level of supervision varying depending on the experience of the trainee and the clinical exposure and case mix undertaken. Outpatient and referral supervision must routinely include the opportunity to personally discuss all cases if required. As training progresses the trainee should have the opportunity for increasing autonomy, consistent with safe and effective care for the patient. Local education providers (LEP's) through their directors of education / clinical tutors and associated specialty tutors have a responsibility to ensure that all trainees work under senior supervision by their clinical / educational supervisors. This will allow a review of the progression of their knowledge, skills and behaviours in particular professional conduct and their maintenance of patient safety will be of paramount importance.

There must be sufficient time in the job plan of educational / clinical supervisors to provide this level of support to the trainees.

Deaneries and LEPs must ensure that trainees have access to on-line learning facilities and libraries.

Trainees will at all times have a named Educational Supervisor and Clinical Supervisor, responsible for overseeing their education. Depending on local

arrangements these roles may be combined into a single role of Educational Supervisor.

The responsibilities of supervisors have been defined by GMC in the document "Operational Guide for the PMETB Quality Framework". These definitions have been agreed with the National Association of Clinical Tutors, the Academy of Medical Royal Colleges and the Gold Guide team at MMC, and are reproduced below:

***Educational supervisor***

*A trainer who is selected and appropriately trained to be responsible for the overall supervision and management of a specified trainee's educational progress during a training placement or series of placements. The Educational Supervisor is responsible for the trainee's Educational Agreement.*

***Clinical supervisor***

*A trainer who is selected and appropriately trained to be responsible for overseeing a specified trainee's clinical work and providing constructive feedback during a training placement. Some training schemes appoint an Educational Supervisor for each placement. The roles of Clinical and Educational Supervisor may then be merged.*

The Educational Supervisor, when meeting with the trainee, should discuss issues of clinical governance, risk management and any report of any untoward clinical incidents involving the trainee. The Educational Supervisor should be part of the clinical specialty team. Thus if the clinical directorate (clinical director) have any concerns about the performance of the trainee, or there were issues of doctor or patient safety, these would be discussed with the Educational Supervisor. These processes, which are integral to trainee development, must not detract from the statutory duty of the trust to deliver effective clinical governance through its management systems.

To provide effective training it is essential that trainers have received appropriate training. All educational supervisors and members of the STC should receive adequate training in: -

- the use of all assessment tools
- equality and diversity issues
- supporting the trainee in difficulty
- appraisal skills
- giving effective feedback
- knowledge and use of the curriculum
- setting objectives
- career advice

Clinical supervisors and educational supervisors should have attended a 'Train the Trainers' course. The Training Programme Director for each region should hold a database of these competencies and forward this annually to their local deanery as part of the QA process.

Endoscopy departments involved in training should be assessed by the Joint Advisory Group on Gastrointestinal Endoscopy (JAG) and be identified as sites appropriate for training. Any shortcomings in the training environment identified by such an assessment will be fed back to the hospital trust responsible for the unit. If there are significant concerns the TPD will be informed who will notify the deanery if training is being compromised.

The clinical training environments at individual training centres should be reviewed annually by the STC. Trainees should participate in an annual trainee survey and be able to report any concerns to the TPD.

The TPD will make an annual return to the deanery as part of the QA framework. The implementation of increasing numbers of formalised assessment tools will increase the amount of time that all trainers will need to spend with their trainees. There should be recognition by individual trusts of this requirement and this should be reflected in the job planning process for all clinical supervisors and educational supervisors.

Academic trainees are encouraged to identify an academic mentor, who will not usually be their research supervisor and will often be from outside their geographical area. The Academy of Medical Sciences organises one such scheme (see <http://www.acmedsci.ac.uk/index.php?pid=91>) but there are others and inclusion in an organised scheme is not a pre-requisite. The Medical Research Society organises annual meetings for clinician scientists in training (see [http://www.medres.org.uk/j/index.php?option=com\\_content&task=view&id=54&Itemid=1](http://www.medres.org.uk/j/index.php?option=com_content&task=view&id=54&Itemid=1)) and this type of meeting provides an excellent setting for trainees to meet colleagues and share experiences.

Opportunities for feedback to trainees about their performance will arise through the use of the workplace-based assessments, regular appraisal meetings with supervisors, other meetings and discussions with supervisors and colleagues, and feedback from ARCP. Frequent and timely feedback on performance is essential for successful work-based experiential learning. To train as a physician a doctor must develop the ability to seek and respond to feedback and clinical practice from a range of individuals to meet the requirements of Good Medical Practice.

## **6.2 Appraisal**

A formal process of appraisals and reviews underpins training. This process ensures adequate supervision during training, provides continuity between posts and different supervisors and is one of the main ways of providing feedback to trainees. All appraisals should be recorded in the ePortfolio.

### **Induction Appraisal**

The trainee and educational supervisor should have an appraisal meeting at the beginning of each post to review the trainee's progress so far, agree learning objectives for the post ahead and identify the learning opportunities presented by the post. Reviewing progress through the curriculum will help trainees to compile an effective Personal Development Plan (PDP) of objectives for the upcoming post. This PDP should be agreed during the Induction Appraisal. The trainee and supervisor should also both sign the educational agreement in the ePortfolio at this time, recording their commitment to the training process.

### **Mid-point Appraisal**

This meeting between trainee and educational supervisor is mandatory (except when an attachment is shorter than 6 months), but is encouraged particularly if either the trainee or educational or clinical supervisor has training concerns or the trainee has been set specific targeted training objectives at their ARCP. At this meeting trainees should review their PDP with their supervisor using evidence from the e-portfolio. Workplace-based assessments and progress through the curriculum can be reviewed to ensure trainees are progressing satisfactorily, and attendance at

educational events should also be reviewed. The PDP can be amended at this review.

### **End of Attachment Appraisal**

Trainees should review the PDP and curriculum progress with their educational supervisor using evidence from the ePortfolio. Specific concerns may be highlighted from this appraisal. The end of attachment appraisal form should record the areas where further work is required to overcome any shortcomings. Further evidence of competence in certain areas may be needed, such as planned workplace-based assessments, and this should be recorded. If there are significant concerns following the end of attachment appraisal then the programme director should be informed.

## **7 Managing curriculum implementation**

This section of the curriculum provides an indication of how the curriculum is managed locally and within programmes.

The organisation of training programmes for Core / ACCS training and specialist training in GIM is the responsibility of the postgraduate deaneries.

The deaneries are establishing appropriate programmes for postgraduate medical training in their regions. These schemes will be run by Schools of Medicine in England, Wales and Northern Ireland and by Transitional Board Schemes in Scotland. In this curriculum, they will be referred to as local Faculties for medical education. The role of the Faculties will be to coordinate local postgraduate medical training, with terms of reference as follows:

- Oversee recruitment and induction of trainees from Foundation to core training – CMT or ACCS(M) and from core training into Specialty Training
- Allocate trainees into particular rotations according to their training needs and wishes
- Oversee the quality of training posts provided locally
- Interface with other Deanery Specialty Training faculties
- Ensure adequate provision of appropriate educational events
- Ensure curriculum implementation across training programmes
- Oversee the workplace – based assessment process within programmes
- Coordinate the ARCP process for trainees
- Provide adequate and appropriate career advice
- Provide systems to identify and assist doctors with training difficulties
- Provide flexible training
- Recognise the potential of specific trainees to progress into an academic career

Educational programmes to train educational supervisors and assessors in work placed assessment may be delivered by deaneries, colleges or both.

The quality of endoscopy training will be independently assessed by the JAG through a series of visits to all endoscopy units which will result in accreditation of training units for periods of 5 years.

The deanery will monitor the quality of the training experience of the trainees by a local trainee survey and returns from the annual GMC survey of trainees.

Implementation of the curriculum is the responsibility of the JRCPTB via its specialty advisory committee (SAC) for Gastroenterology. The SAC is formally constituted with representatives from each SHA in England, from the developed nations and has trainee and lay representation. This committee supervises and reviews all training posts in gastroenterology and provides external representatives at Penultimate Year Assessments. Between them, members of the SAC usually attend PYA's for between 100 and 150 GI trainees a year, thus ensuring the committee has a wide experience of how the curriculum is being implemented in training centres.

It is the responsibility of the committee Chair and Secretary to ensure that curriculum developments are communicated to Heads of Specialty Schools, Deanery Specialty Training Committees and TPD's. The SAC also produces and administers the regulations, which govern the curriculum.

The SAC and STC's all have trainee representation. Trainee representatives on the SAC provide feedback on the curriculum at each of the SAC meetings.

The introduction of the ePortfolio allows members of the SAC to remotely monitor progress of trainees ensuring that they are under proper supervision and are progressing satisfactorily.

### **7.1 Intended use of curriculum by trainers and trainees**

This curriculum and ePortfolio are web-based documents which are available from the Joint Royal Colleges of Physicians Training Board (JRCPTB) website [www.jrcptb.org.uk](http://www.jrcptb.org.uk).

The educational supervisors and trainers can access the up-to-date curriculum from the JRCPTB website and will be expected to use this as the basis of their discussion with trainees. Both trainers and trainees are expected to have a good knowledge of the curriculum and should use it as a guide for their training programme.

Each trainee will engage with the curriculum by maintaining a portfolio. The trainee will use the curriculum to develop learning objectives and reflect on learning experiences.

### **7.2 Recording progress**

On enrolling with JRCPTB trainees will be given access to the ePortfolio for Gastroenterology. The ePortfolio allows evidence to be built up to inform decisions on a trainee's progress and provides tools to support trainees' education and development.

The trainee's main responsibilities are to ensure the ePortfolio is kept up to date, arrange assessments and ensure they are recorded, prepare drafts of appraisal forms, maintain their personal development plan, record their reflections on learning and record their progress through the curriculum.

The supervisor's main responsibilities are to use ePortfolio evidence such as outcomes of assessments, reflections and personal development plans to inform appraisal meetings. They are also expected to update the trainee's record of progress through the curriculum, write end-of-attachment appraisals and supervisor's reports.



Deaneries, Training Programme Directors, college tutors and ARCP panels may use the ePortfolio to monitor the progress of trainees for whom they are responsible.

A logbook of practical procedures should be maintained by the trainee and presented to the ARCP panel prior the formal review. This allows the STC to confirm adequate quality of training and ensure an appropriate exposure of the trainee to endoscopic training opportunities

JRCPTB will use summarised, anonymous ePortfolio data to support its work in quality assurance.

All appraisal meetings, personal development plans and workplace based assessments should be recorded in the ePortfolio. Trainees and supervisors should electronically sign the educational agreement. Trainees are encouraged to reflect on their learning experiences and to record these in the ePortfolio. Reflections may be private or shared.

All ePortfolio content should be linked to curriculum competencies in order to provide evidence towards acquisition of these competencies. Trainees can add their own self-assessment ratings to record a personal view of progress. The aims of self-assessment are:

- To provide the means for reflection and evaluation of current practice
- To inform discussions with supervisors to help both gain insight and assist in developing personal development plans.
- To identify shortcomings between experience, competency, and areas defined in the curriculum to help plan future training requirements

Supervisors can sign-off and comment on curriculum competencies to build up a picture of progression and to inform ARCP panels.

## **8 Curriculum Review and Updating**

The SAC in Gastroenterology will oversee the evaluation of this curriculum and portfolio. The curriculum is regarded as a living document, and the committee will ensure that it is able to respond swiftly to new developments. The outcome regular evaluation will inform the future development of the curriculum.

The SAC for Gastroenterology will consult widely within the gastroenterological community and will also involve trainees, lay representatives, and patients in the review process.

The new curriculum will be reviewed after one year to ensure deliverability and new developments. A formal review is planned after three years.

Evaluation of the curriculum will ascertain

- Learner response to the curriculum
- Modification of attitudes and perceptions
- Learner acquisition of knowledge and skills
- Learners behavioural change
- Change in organisational practice

Evaluation methods will include

- Trainee questionnaire
- College representative and Programme Director questionnaire
- Focused discussions with educational supervisors, trainees, programme Directors and Postgraduate Deans

Monitoring will be the responsibility of the Programme Directors within deaneries

Trainee involvement in curriculum review will be facilitated through

- Involvement of trainees in local training committees
- Involvement of trainee representative on SAC committee
- Informal feedback during appraisal and local review of programme.

## 9 Equality and diversity

The Royal Colleges of Physicians will comply, and ensure compliance, with the requirements of equality and diversity legislation, such as the:

- Race Relations (Amendment) Act 2000
- Disability Discrimination Act 1995
- Human Rights Act 1998
- Employment Equality (Age) Regulation 2006
- Special Educational Needs and Disabilities Act 2001
- Data Protection Acts 1984 and 1998

The Federation of the Royal Colleges of Physicians believes that equality of opportunity is fundamental to the many and varied ways in which individuals become involved with the Colleges, either as members of staff and Officers; as advisers from the medical profession; as members of the Colleges' professional bodies or as doctors in training and examination candidates. Accordingly, it warmly welcomes contributors and applicants from as diverse a population as possible, and actively seeks to recruit people to all its activities regardless of race, religion, ethnic origin, disability, age, gender or sexual orientation.

Deanery quality assurance will ensure that each training programme complies with the equality and diversity standards in postgraduate medical training as set by GMC.

Compliance with anti-discriminatory practice will be assured through:

- monitoring of recruitment processes;
- ensuring all College representatives and Programme Directors have attended appropriate training sessions prior to appointment or within 12 months of taking up post;
- Deaneries must ensure that educational supervisors have had equality and diversity training (at least as an e learning module) every 3 years;
- Deaneries must ensure that any specialist participating in trainee interview/appointments committees or processes has had equality and diversity training (at least as an e module) every 3 years;
- ensuring trainees have an appropriate, confidential and supportive route to report examples of inappropriate behaviour of a discriminatory nature. Deaneries and Programme Directors must ensure that on appointment trainees are made aware of the route in which inappropriate or discriminatory behaviour can be reported and supplied with contact names and numbers.

Deaneries must also ensure contingency mechanisms are in place if trainees feel unhappy with the response or uncomfortable with the contact individual;

- monitoring of College Examinations;
- ensuring all assessments discriminate on objective and appropriate criteria and do not unfairly disadvantage trainees because of gender, ethnicity, sexual orientation or disability (other than that which would make it impossible to practise safely as a physician). All efforts shall be made to ensure the participation of people with a disability in training.

In order to meet its obligations under the relevant equal opportunities legislation, such as the Race Relations (Amendment) Act 2000, the MRCP(UK) Central Office, the Colleges' Examinations Departments and the panel of Examiners have adopted an Examination Race Equality Action Plan. This ensures that all staff involved in examination delivery will have received appropriate briefing on the implications of race equality in the treatment of candidates.

All Examiner nominees are required to sign up to the following statement in the Examiner application form "I have read and accept the conditions with regard to the UK Race Relations Act 1976, as amended by the Race Relations (Amendment) Act 2000, and the Disabilities Discrimination Acts of 1995 and 2005 as documented above."

In order to meet its obligations under the relevant equal opportunities legislation such as the Disability Discrimination Acts 1995 and 2005, the MRCP(UK) Management Board is formulating an Equality Discrimination Plan to deal with issues of disability. This will complement procedures on the consideration of special needs which have been in existence since 1999 and were last updated by the MRCP(UK) Management Board in January 2005. MRCP(UK) has introduced standard operating procedures to deal with the common problems e.g. Dyslexia/Learning disability; Mobility difficulties; Chronic progressive condition; Blind/Partially sighted; Upper limb or back problem; Repetitive Strain Injury (RSI); Chronic recurrent condition (e.g. asthma, epilepsy); Deaf/Hearing loss; Mental Health difficulty; Autism Spectrum Disorder (including Asperger Syndrome); and others as appropriate. The Academic Committee would be responsible for policy and regulations in respect of decisions on accommodations to be offered to candidates with disabilities.

The Regulations introduced to update the Disability Discrimination Acts and to ensure that they are in line with EU Directives have been considered by the MRCP(UK) Management Board. External advice was sought in the preparation of the updated Equality Discrimination.

## 10 Acknowledgements

The members of the SAC in Gastroenterology and of the British Society of Gastroenterology Training Committee gave valuable advice at all stages of the development of this curriculum and commented critically but constructively on successive drafts. Special thanks are due to the chair of the Training Committee, Dr Martin Lombard.

There was wide consultation within the specialty as outlined in the Introduction to this document but much is owed to all those who attended the Gastroenterology Curriculum Conference at the Royal College of Physicians of London on 6<sup>th</sup> March 2009. The curriculum is very much more than a revision of the existing document. It is a radical re-design of a programme of training which is forward-looking and has the purpose of producing highly-trained specialists with knowledge, skills and behaviours we believe will be very relevant to contemporary clinical practice from 2015 onwards. The framework of the present document emerged from this conference and a debt of gratitude is extended to all those who came along on the day.

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Dr Tony Ellis (Secretary SAC)  
Dr Ian Forgacs (Chair SAC)