The Royal College of Anaesthetists

The College of Emergency Medicine

The Royal College of Paediatrics & Child Health

The Royal College of Physicians

The Royal College of Physicians of Edinburgh

The Royal College of Physicians and Surgeons of Glasgow

The Royal College of Surgeons of Edinburgh

The Royal College of Surgeons of England

Part IV

The CCT in
Intensive Care Medicine

Core and Common Competencies

The Faculty of
Intensive Care Medicine

Contents

1. Introduction

ICM CCT trainees will initially enter the ACCS, CAT or CMT programme. The competency structure of these programmes is articulated in a different way from that of CoBaTrICE. In order to ensure that these core programmes fulfil the training needs of the ICM CCT the relevant competencies in the CAT, CMT and the shared common competencies have been mapped onto the CoBaTrICE competencies (the ACCS curriculum already contains these elements of the CAT and CMT programmes and therefore did not require separate mapping).

The competencies are therefore all contained within the ICM CCT Syllabus with the relevant mapping shown below; however they are included here in their entirety because they will be familiar to trainees and trainers in this format.

The mapping demonstrates that by the end of CT2 all three cores will produce trainees with the relevant shared competencies needed for the ICM CCT. In addition, trainees in each core will have gained additional competencies relevant to ICM. The mapping scheme will aid trainees and trainers to identify those areas where sufficient training has already occurred or where further training is required in order to achieve the equality of competencies required of all trainees by the end of Stage 1 training (ST4).

1.1 Assessment of acquisition of the common competencies

For trainees within core training, knowledge of the common competencies may be tested while taking either the MRCP(UK), Primary FRCA or (FRCEM Primary (or MRCEM Part A after August 2012) AND FRCEM Intermediate SAQ (or MRCEM Part B after August 2012) AND FRCEM Intermediate SJP; OR MRCEM obtained prior to August 2018) examination. Competence to at least ICM Level 2 descriptors will be expected prior to progression into higher specialty training. Further assessment will be undertaken as outlined by the various workplace-based assessments listed.

1.2 Assessment Tools Key

Each competence is mapped to the relevant assessment tools as follows:

Assessment Tools	
Code	**Full name**
D	Direct Observation of procedural Skills [DOPS]
I	ICM Mini- Clinical Evaluation Exercise [ICM-CEX]
C	Case Based Discussion [CBD]
M	Multisource Feedback [MSF]
T	Acute Care Assessment Tool [ACAT]
S	Simulation
E	Examination

Please note that within the core and common competencies, the designation 'I' (ICM-CEX) or 'E' (Examination) are interchangeable with any of the specialty-specific Mini-CEX assessments or examination components within the ICM CCT programme and its designated multiple cores.

1.3 Good Medical Practice

Each core and common competence is also mapped to the four domains of Good Medical Practice:

Domains of Good Medical Practice	
Domain	**Descriptor**
1	Knowledge, skills and performance
2	Safety and quality
3	Communication, partnership and teamwork
4	Maintaining trust

2. Common competencies

The common competencies are those that should be acquired by all intensivists during their training period starting within their undergraduate career and developed throughout their postgraduate career.

The first three common competencies cover the simple principles of history taking clinical examination and therapeutics and prescribing. These are competencies with which the specialist trainee should be well acquainted from Foundation training.

It is vital that these competencies are practised to a high level by all specialty trainees who should be able to achieve competencies to the highest descriptor level early in their specialty training career. There are four descriptor levels (see *Part II*). It is anticipated that core trainees will achieve competencies to level 2 and ICM specialist trainees will achieve the relevant competencies to level 4.

2.1 History Taking

To progressively develop the ability to obtain a relevant focussed history from increasingly complex patients and challenging circumstances. To record accurately and synthesise history with clinical examination and formulation of management plan according to likely clinical evolution

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Recognise the importance of different elements of history	I, E	1	2.1
Recognise the importance of clinical, psychological, social, cultural and nutritional factors particularly those relating to ethnicity, race, cultural or religious beliefs and preferences, sexual orientation, gender and disability	I	1	12.5
Recognise that patients do not present history in structured fashion	T, I, E	1, 3	12.1
Know likely causes and risk factors for conditions relevant to mode of presentation	I, E	1	2.1
Recognise that history should inform examination, investigation and management	I, E	1	12.5
Skills			
Identify and overcome possible barriers to effective communication	I, E	1, 3	12.1
Manage time and draw consultation to a close appropriately	I, E	1, 3	12.1
Supplement history with standardised instruments or questionnaires when relevant	T, I, E	1	12.1
Manage alternative and conflicting views from family, carers and friends	T, I, E	1, 3	12.1
Assimilate history from the available information from patient and other sources	T, I, E	1, 3	12.1 2.2
Recognise and interpret the use of non verbal communication from patients and carers	I, E	1, 3	1.2 2.2
Focus on relevant aspects of history	T, I, E	1, 3	2.1
Behaviours			
Show respect and behave in accordance with Good Medical Practice	T, I, E	3, 4	12.1

Level Descriptor	
1	Obtains, records and presents accurate clinical history relevant to the clinical presentation. Elicits most important positive and negative indicators of diagnosis. Starts to ignore irrelevant information
2	Demonstrates ability to obtain relevant focussed clinical history in the context of limited time e.g. outpatients, ward referral. Demonstrates ability to target history to discriminate between likely clinical diagnoses. Records information in most informative fashion.
3	Demonstrates ability to rapidly obtain relevant history in context of severely ill patients. Demonstrates ability to obtain history in difficult circumstances e.g. from angry or distressed patient / relatives. Demonstrates ability to keep interview focussed on most important clinical issues
4	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

2.2 Clinical Examination

To progressively develop the ability to perform focussed and accurate clinical examination in increasingly complex patients and challenging circumstances;
To relate physical findings to history in order to establish diagnosis and formulate a management plan

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Understand the need for a valid clinical examination	C, I, E	1	2.1
Understand the basis for clinical signs and the relevance of positive and negative physical signs	T, C, I, E	1	2.1
Recognise constraints to performing physical examination and strategies that may be used to overcome them	C, I, E	1	2.1
Recognise the limitations of physical examination and the need for adjunctive forms of assessment to confirm diagnosis	T, C, I, E	1	2.2
Skills			
Perform an examination relevant to the presentation and risk factors that is valid, targeted and time efficient	T, C, I, E	1	2.1
Recognise the possibility of deliberate harm in vulnerable patients and report to appropriate agencies	T, C, I	1, 2	2.1
Interpret findings from the history, physical examination and mental state examination, appreciating the importance of clinical, psychological, religious, social and cultural factors	I, C	1	2.8 12.5
Actively elicit important clinical findings	C, M, E	1	2.1
Perform relevant adjunctive examinations	C, M, E	1	2.1
Behaviours			
Show respect and behaves in accordance with Good Medical Practice	T, C, I, M	1, 4	12.6

Level Descriptor	
1	Performs, accurately records and describes findings from basic physical examination. Elicits most important physical signs. Uses and interprets findings adjuncts to basic examination e.g. internal examination, blood pressure measurement, pulse oximetry, peak flow.
2	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 e.g. electrocardiography, spirometry, ankle brachial pressure index, fundoscopy.
3	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 e.g. sigmoidoscopy, FAST ultrasound, echocardiography
4	Rapidly and accurately performs and interprets focussed clinical examination in challenging circumstances e.g. acute medical or surgical emergency

2.3 Therapeutics and safe prescribing

To progressively develop your ability to prescribe, review and monitor appropriate medication relevant to clinical practice including therapeutic and preventative indications

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Recall indications, contraindications, side effects, drug interactions and dosage of commonly used drugs	T, C, I, E	1	4.1
Recall range of adverse drug reactions to commonly used drugs, including complementary medicines	T, C, I, E	1	4.1
Recall drugs requiring therapeutic drug monitoring and interpret results	T, C, I, E	1	4.1
Outline tools to promote patient safety and prescribing, including IT systems	T, C, I	1, 2	11.3
Define the effects of age, body size, organ dysfunction and concurrent illness on drug distribution and metabolism relevant to the trainees practice	T, C, I, E	1, 2	4.1 Basic Sciences
Recognise the roles of regulatory agencies involved in drug use, monitoring and licensing (e.g. Committee on Safety of Medicines, National Institute for Clinical	T, C, I	1, 2	4.1

Excellence / Scottish Medicines Consortium, regional and hospital formulary committees).			
Skills			
Review the continuing need for long term medications relevant to the trainees clinical practice	T, C, I, E	1, 2	4.1
Anticipate and avoid defined drug interactions, including complementary medicines	T, C, I, E	1	4.1
Advise patients (and carers) about important interactions and adverse drug effects	T, C, I, E	1, 3	4.1
Make appropriate dose adjustments following therapeutic drug monitoring, or physiological change (e.g. deteriorating renal function)	T, C, I, E	1	4.1
Use IT prescribing tools where available to improve safety	T, C, I	1, 2	4.1
Employ validated methods to improve patient concordance with prescribed medication	T, C	1, 3	4.1
Provide comprehensible explanations to the patient, and carers when relevant, for the use of medicines	T, C, I, E	1, 3	12.1
Behaviours			
Recognise the benefit of minimising number of medications taken by a patient	T, C, I, E	1	4.1
Appreciate the role of non-medical prescribers	T, C, I	1, 3	12.2
Remain open to advice from other health professionals on medication issues	T, C, I	1, 3	4.1
Recognise the importance of resources when prescribing, including the role of a Drug Formulary	T, C, I	1, 2	12.8
Ensure prescribing information is shared promptly and accurately between a patient's health providers, including between primary and secondary care	T, C	1, 3	4.1
Remain up to date with therapeutic alerts, and respond appropriately	T, C	1	4.1

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

Patient-centred care

This part of the generic competencies relate to direct clinical practise; the importance of patient needs at the centre of care and of promotion of patient safety, team working, and high quality infection control. Furthermore, the prevalence of long term conditions in patient presentation to Intensive Care Medicine means that specific competencies have been defined that are mandated in the management of this group of patients.

Many of these competencies will have been acquired during the Foundation programme and core training but as part of the maturation process for the intensivist these competencies will become more finely honed and all trainees should be able to demonstrate the competencies as described by the highest level descriptors by the time of their CCT.

2.4 Time management and decision making
To become increasingly able to prioritise and organise clinical and clerical duties in order to optimise patient care; To become increasingly able to make appropriate clinical and clerical decisions in order to optimise the effectiveness of the clinical team resource

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Understand that organisation is key to time management	T, C	1	12.11
Understand that some tasks are more urgent or more important than others	T, C, E	1	1.1
Understand the need to prioritise work according to urgency and importance	T, C, E	1	1.1
Understand that some tasks may have to wait or be delegated to others	T, C	1	1.1
Outline techniques for improving time management	T, C	1	12.11
Understand the importance of prompt investigation, diagnosis and treatment in disease management	T, C, I, E	1, 2	1.1 2.8
Skills			
Identify clinical and clerical tasks requiring attention or predicted to arise	T, C, I	1, 2	12.11
Estimate the time likely to be required for essential tasks and plan accordingly	T, C, I	1	12.11
Group together tasks when this will be the most effective way of working	T, C, I	1	12.11
Recognise the most urgent / important tasks and ensure that they are managed expediently	T, C, I	1	12.11
Regularly review and re-prioritise personal and team work load	T, C, I	1	12.11
Organise and manage workload effectively	T, C, I	1	12.11
Behaviours			
Ability to work flexibly and deal with tasks in an effective fashion	T, C, I	3	12.11
Recognise when you or others are falling behind and take steps to rectify the situation	T, C, I	3	12.11
Communicate changes in priority to others	T, C, I	1	12.2
Remain calm in stressful or high pressure situations and adopt a timely, rational approach	T, C, I	1	12.11

Level Descriptor	
1	Recognises the need to identify work and compiles a list of tasks. Works systematically through tasks with little attempt to prioritise. Needs direction to identify most important tasks. Sometimes slow to perform important work. Does not use other members of the clinical team. Finds high workload very stressful.
2	Organises work appropriately but does not always respond to or anticipate when priorities should be changed. Starting to recognise which tasks are most urgent. Starting to utilise other members of the clinical team but not yet able to organise their work. Requires some direction to ensure that all tasks completed in a timely fashion.
3	Recognises the most important tasks and responds appropriately. Anticipates when priorities should be changed. Starting to lead and direct the clinical team in effective fashion. Supports others who are falling behind. Requires minimal organisational supervision
4	Automatically prioritises and manages workload in most effective fashion. Communicates and delegates rapidly and clearly. Automatically responsible for organising the clinical team. Calm leadership in stressful situations

2.5 Decision making and clinical reasoning

To progressively develop the ability to formulate a diagnostic and therapeutic plan for a patient according to the clinical information available.
To progressively develop the ability to prioritise the diagnostic and therapeutic plan.
To be able to communicate the diagnostic and therapeutic plan appropriately

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Define the steps of diagnostic reasoning:	T, C, I	1	3.1
Interpret history and clinical signs	T, C, I, E	1	2.1
Conceptualise clinical problem	T, C, I, E	1	3.1

Generate hypothesis within context of clinical likelihood	T, C, I, E	1	2.8
Test, refine and verify hypotheses	T, C, I, E	1	2.8
Develop problem list and action plan	T, C, I, E	1	3.1
Recognise how to use expert advice, clinical guidelines and algorithms	T, C, I, E	1	12.3 11.6
Recognises the need to determine the best value and most effective treatment both for the individual patient and for a patient cohort	T, C, I, E	1, 2	11.8
Define the concepts of disease natural history and assessment of risk	T, C, I	1	3.1
Recall methods and associated problems of quantifying risk e.g. cohort studies	T, C	1	12.13
Outline the concepts and drawbacks of quantitative assessment of risk or benefit e.g. numbers needed to treat	T, C	1	12.13
Describe commonly used statistical methodology	C, I	1	12.13
Know how relative and absolute risks are derived and the meaning of the terms predictive value, sensitivity and specificity in relation to diagnostic tests	C, I, E	1	12.13 Basic Sciences
Skills			
Interpret clinical features, their reliability and relevance to clinical scenarios including recognition of the breadth of presentation of common disorders	T, C, I, E	1	2.8
Recognise critical illness and respond with due urgency	T, C, I, E	1	1.1
Generate plausible hypothesis(es) following patient assessment	T, C, I, E	1	2.8
Construct a concise and applicable problem list using available information	T, C, I, E	1	2.8
Construct an appropriate management plan and communicate this effectively to the patient, parents and carers where relevant	T, C, I, E	1, 3, 4	2.8 12.1
Define the relevance of an estimated risk of a future event to an individual patient	T, C, I, E	1	11.8
Use risk calculators appropriately	T, C, I	1	1.4
Apply quantitative data of risks and benefits of therapeutic intervention to an individual patient	T, C, I	1	4.1
Search and comprehend medical literature to guide reasoning	T, C	1	12.13
Behaviours			
Recognise the difficulties in predicting occurrence of future events	T, C, I, E	1	11.8
Show willingness to discuss intelligibly with a patient the notion and difficulties of prediction of future events, and benefit/risk balance of therapeutic intervention	T, C, I, E	3	12.4
Be willing to facilitate patient choice	T, C, I, E	3	12.1
Show willingness to search for evidence to support clinical decision making	T, C, I	1.4	12.13
Demonstrate ability to identify one's own biases and inconsistencies in clinical reasoning	T, C, I	1.3	12.11

Level Descriptor	
1	*In a straightforward clinical case:* Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence. Institutes an appropriate investigative plan. Institutes an appropriate therapeutic plan. Seeks appropriate support from others. Takes account of the patient's wishes
2	*In a difficult clinical case:* Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence. Institutes an appropriate investigative plan. Institutes an appropriate therapeutic plan. Seeks appropriate support from others. Takes account of the patient's wishes
3	*In a complex, non-emergency case:* Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence. Institutes an appropriate investigative plan. Institutes an appropriate therapeutic plan. Seeks appropriate support from others. Takes account of the patient's wishes

4	*In a complex, non-emergency case:* Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence. institutes an appropriate investigative plan. Institutes an appropriate therapeutic plan. Seeks appropriate support from others. Takes account of the patient's wishes and records them accurately and succinctly

2.6 The patient as central focus of care

Prioritises the patient's wishes encompassing their beliefs, concerns expectations and needs.

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Recall health needs of particular populations e.g. ethnic minorities and recognise the impact of culture and ethnicity in presentations of physical and psychological conditions	T, C, E	1	12.5
Skills			
Give adequate time for patients to express ideas, concerns and expectations	T, I, E	1, 3, 4	12.1
Respond to questions honestly and seek advice if unable to answer	T, C, I, E	3	12.1
Encourage the health care team to respect the philosophy of patient-focused care	T, C, I, M	3	12.4
Develop a self-management plan including investigation, treatments and requests/instructions to other healthcare professionals, in partnership with the patient	T, C, I, E	1, 3	7.4
Support patients, parents and carers where relevant to comply with management plans	T, C, I, E	3	7.4
Encourage patients to voice their preferences and personal choices about their care	T, I, E	3	12.1
Behaviours			
Support patient self-management	T, C, I	3	7.4
Recognise the duty of the medical professional to act as patient advocate	T, C, I, M	3, 4	12.4

Level Descriptor	
1	Responds honestly and promptly to patient questions but knows when to refer for senior help. Recognises the need for disparate approaches to individual patients
2	Recognises more complex situations of communication, accommodates disparate needs and develops strategies to cope
3	Deals rapidly with more complex situations, promotes patients self care and ensures all opportunities are outlined
4	Is able to deal with all cases to outline patient self care and to promote the provision of this when it is not readily available

2.7 Prioritisation of patient safety in clinical practice

To understand that patient safety depends on the organisation of care and health care staff working well together.
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.
Ensure that all staff are aware of risks and work together to minimise risk

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Outline the features of a safe working environment	T, C, I	1	11.3
Outline the hazards of medical equipment in common use	T, C	1	11.3
Recall side effects and contraindications of medications prescribed	T, C, I, E	1	4.1
Recall principles of risk assessment and management	C	1	11.4
Outline human factors theory and understand its impact on safety	C	1	11.3
Understand root cause analysis	C	1	11.3

Understand significant event analysis	C	1	11.3
Recall the components of safe working practice in the personal, clinical and organisational settings	T, C	1	11.3
Recall local procedures for optimal practice e.g. GI bleed protocol, safe prescribing	T, C, I	1	11.3
Recall local procedures for optimal practice e.g. GI bleed protocol, safe prescribing	T, C, I	1	11.6
Skills			
Recognise when a patient is not responding to treatment, reassess the situation, and encourage others to do so	T, C, I, E	1	2.10 8.2
Ensure the correct and safe use of medical equipment, ensuring faulty equipment is reported appropriately	T, C, I	1	2.9
Improve patients' and colleagues' understanding of the side effects and contraindications of therapeutic intervention	T, C, I, E	1, 3	4.1
Sensitively counsel a colleague following a significant event, or near incident, to encourage improvement in practice of individual and unit	T, C	3	12.2
Recognise and respond to the manifestations of a patient's deterioration (symptoms, signs, observations, and laboratory results) and support other members of the team to act similarly	T, C, I, M	1	1.1
Behaviours			
Continue to maintain a high level of safety awareness and consciousness at all times	T, C, I	2	12.11 11.3
Encourage feedback from all members of the team on safety issues	T, C, I, M	3	11.4
Show willingness to take action when concerns are raised about performance of members of the healthcare team, and act appropriately when these concerns are voiced to you by others	T, C, I, M	3	11.8
Continue to be aware of one's own limitations, and operate within them competently	T, C, I	1	12

Level Descriptor	
1	Discusses risks of treatments with patients and is able to help patients make decisions about their treatment. Does not hurry patients into decisions. Promotes patients safety to more junior colleagues. Always ensures the safe use of equipment. Follows guidelines unless there is a clear reason for doing otherwise. Acts promptly when a patient's condition deteriorates. 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 cause analysis
2	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
3	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
4	Shows support for junior colleagues who are involved in untoward events. Is fastidious about following safety protocols and encourages junior colleagues to do the same

2.8 Team working and patient safety

To develop the ability to work well in a variety of different teams – for example the ward or unit 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 able to deliver better, safer care

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Outline the components of effective collaboration	T, C	1	12.7
Describe the roles and responsibilities of members of the healthcare team	T, C	1	12.7

Outline factors adversely affecting a doctor's performance and methods to rectify these	C	1	12.7
Understand the role of Notification of diseases within the UK and identify the principle notifiable diseases for UK and international purposes	T, C, I	1	11.2
Skills			
Practise with attention to the important steps of providing good continuity of care	T, C, I	1, 3, 4	12.8
Accurate attributable note-keeping	T, C, I	1, 3	12.3
Preparation of patient lists with clarification of problems and ongoing care plan	T, C, I, M	1	12.2
Detailed handover between shifts and areas of care	T, C, I, M	1, 3	12.8
Demonstrate leadership and management in the following areas: • Education and training • Deteriorating performance of colleagues (e.g. stress, fatigue) • High quality care Effective handover of care between shifts and teams	T, C, I	1, 2, 3	12.10 12.13 12.14 11.4 11.6 12.8
Lead and participate in interdisciplinary team meetings	T, C, I	3	11.5
Provide appropriate supervision to less experienced colleagues	T, C, I	3	12.10
Behaviours			
Encourage an open environment to foster concerns and issues about the functioning and safety of team working	T, C, M	3	12.2
Recognise and respect the request for a second opinion	T, C, M	3	12.2
Recognise the importance of induction for new members of a team	T, C, M	3	11.8
Recognise the importance of prompt and accurate information sharing with Primary Care team following hospital discharge	T, C, I, M	3	12.8

Level Descriptor	
1	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
2	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. To develop the leadership skills necessary to lead teams so that they are more effective and able to deliver better safer care
3	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
4	Leads multi-disciplinary team meetings allowing all voices to be heard and considered. Fosters an atmosphere of collaboration. Demonstrates ability to work with the virtual team. Ensures that team functioning is maintained at all times. Promotes rapid conflict resolution

2.9 Principles of quality and safety management

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

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			

Understand the elements of clinical governance	C, M	1	11.8
Recognise that governance safeguards high standards of care and facilitates the development of improved clinical services	C, M	1, 2	11.8
Define local and national significant event reporting systems relevant to specialty	T, C, M	1	11.4
Recognise importance of evidence-based practice in relation to clinical effectiveness	C, E	1	11.6
Outline local health and safety protocols (fire, manual handling etc)	C	1	11.6
Understand risk associated with the trainee's specialty work including biohazards and mechanisms to reduce risk	C	1	11.2 11.3
Outline the use of patient early warning systems to detect clinical deterioration where relevant to the trainees clinical specialty	T, C, M	1	11.7
Keep abreast of national patient safety initiatives including National Patient Safety Agency , NCEPOD reports, NICE guidelines etc	T, C, M	1	11.6
Skills			
Adopt strategies to reduce risk e.g. surgical pause	T, C	1, 2	11.8
Contribute to quality improvement processes e.g. • Audit of personal and departmental performance • Errors / discrepancy meetings • Critical incident reporting • Unit morbidity and mortality meetings Local and national databases	C	2	12.15 11.4 11.8 11.7
Maintain a folder of information and evidence, drawn from your medical practice	C	2	12.13
Reflect regularly on your standards of medical practice in accordance with GMC guidance on licensing and revalidation	Audit	1, 2, 3, 4	12.13
Behaviours			
Show willingness to participate in safety improvement strategies such as critical incident reporting	C, M	3	11.4
Engage with an open no blame culture	C, M	3	11.4
Respond positively to outcomes of audit and quality improvement	C, M	1, 3	12.15
Co-operate with changes necessary to improve service quality and safety	C, M	1, 2	11.6

Level Descriptor	
1	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
2	Able to define key elements of clinical governance. Engages in quality Improvement
3	Demonstrates personal and service performance. Plays a significant role in a quality improvement project
4	Leads in review of patient safety issues. Implements change to improve service. Engages and guides others to embrace governance

2.10 Managing long term conditions and promoting patient self-care

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Recall the natural history of diseases that run a chronic course	T, C, I, E	1	3.2
Define the role of rehabilitation services and the multi-disciplinary team to facilitate long-term care	T, C, I, E	1	7.4
Outline the concept of quality of life and how this can be measured	C	1	7.4
Outline the concept of patient self-care	C, M	1	7.4
Know, understand and be able to compare medical and social models of disability	C	1	7.4

Understand the relationship between local health, educational and social service provision including the voluntary sector	C	1	7.4
Skills			
Develop and agree a management plan with the patient (and carers), ensuring comprehension to maximise self-care within care pathways when relevant	T, C, I, E	1, 3	3.2
Develop and sustain supportive relationships with patients with whom care will be prolonged	C, I	1, 4	12.1
Provide effective patient education, with support of the multi-disciplinary team	T, C, I, E	1, 3, 4	12.1
Promote and encourage involvement of patients in appropriate support networks, both to receive support and to give support to others	C, E	1, 3	7.4
Encourage and support patients in accessing appropriate information	C, E	1, 3	12.1
Provide the relevant and evidence based information in an appropriate medium to enable sufficient choice, when possible	C, E	1, 3	12.1
Behaviours			
Show willingness to act as a patient advocate	T, C, I, E	3, 4	12.4
Recognise the impact of long term conditions on the patient, family and friends	T, C, I, E	1	7.4
Ensure equipment and devices relevant to the patient's care are discussed	T, C, I	1	12.4
Put patients in touch with the relevant agency including the voluntary sector from where they can procure the items as appropriate	T, C, I	1, 3	7.4
Provide the relevant tools and devices when possible	T, C, I	1, 2	7.4
Show willingness to facilitate access to the appropriate training and skills in order to develop the patient's confidence and competence to self care	T, C, I	1, 3, 4	7.4
Show willingness to maintain a close working relationship with other members of the multi-disciplinary team, primary and community care	T, C, I, M	3	12.7
Recognise and respect the role of family, friends and carers in the management of the patient with a long term condition	T, C, I	1, 3	7.4

Level Descriptor	
1	Describes relevant long term conditions. Understands the meaning of quality of life. Is aware of the need for promotion of patient self care. Helps the patient with an understanding of their condition and how they can promote self management
2	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. Teaches the patient and within the team to promote excellent patient care
3	Develops management plans in partnership with the patient that are pertinent to the patients long term condition. Can use relevant tools and devices in improving patient care. Engages with relevant external agencies to promote patient care
4	Provides leadership within the multidisciplinary team that is responsible for management of patients with long term conditions. Helps the patient networks develop and strengthen

Communication

Issues of communication both with patients and carers and within the healthcare team are often causes of complaint and inadequate communication can lead to poorer standards of patient care. Specific issues are highlighted within this section to promote better communication generally and within certain situations

2.11 Relationships with patients and communication within a consultation			
Communicate effectively and sensitively with patients, relatives and carers			
Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			

Structure an interview appropriately	T, C, I, E	1	12.1
Understand the importance of the patient's background, culture, education and preconceptions (ideas, concerns, expectations) to the process	T, C, I	1	12.5
Skills			
Establish a rapport with the patient and any relevant others (e.g. carers)	T, C, I, E	1, 3	12.1
Listen actively and question sensitively to guide the patient and to clarify information	T, I, E	1, 3	12.1
Identify and manage communication barriers, tailoring language to the individual patient and using interpreters when indicated	T, C, I, E	1, 3	12.1
Deliver information compassionately, being alert to and managing their and your emotional response (anxiety, antipathy etc)	T, C, I, E	1, 3, 4	12.1
Use, and refer patients to, appropriate written and other information sources	T, C, I, E	1, 3	12.1
Check the patient's/carer's understanding, ensuring that all their concerns/questions have been covered	T, C, I, E	1, 3	12.1
Indicate when the interview is nearing its end and conclude with a summary	T, C, I, E	1, 3	12.1
Make accurate contemporaneous records of the discussion	T, C, I	1, 3	12.3
Manage follow-up effectively	T, C, I	1, 3	7.4
Behaviours			
Approach the situation with courtesy, empathy, compassion and professionalism, especially by appropriate body language - act as an equal not a superior	T, C, I, M, E	1, 3, 4	12.1
Ensure that the approach is inclusive and patient centred and respect the diversity of values in patients, carers and colleagues	T, C, I, M, E	1, 3	12.5
Be willing to provide patients with a second opinion	T, C, I, M, E	1, 3	12.4
Use different methods of ethical reasoning to come to a balanced decision where complex and conflicting issues are involved	T, C, I, M, E	1, 3	12.12
Be confident and positive in one's own values	T, C, I, M, E	1, 3	12.11

Level Descriptor	
1	Conducts simple interviews with due empathy and sensitivity and writes accurate records thereof
2	Conducts interviews on complex concepts satisfactorily, confirming that accurate two-way communication has occurred
3	Handles communication difficulties appropriately, involving others as necessary. establishes excellent rapport
4	Shows mastery of patient communication in all situations, anticipating and managing any difficulties which may occur

2.12 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

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Recognise that the way in which bad news is delivered irretrievably affects the subsequent relationship with the patient	T, C, I, M, E	1	12.1
Recognise that every patient may desire different levels of explanation and have different responses to bad news	T, C, I, M, E	1, 4	12.1
Recognise that bad news is confidential but the patient may wish to be accompanied	T, C, I, M, E	1	12.1 12.4
Recognise that breaking bad news can be extremely stressful for the doctor or professional involved	T, C, I, M, E	1, 3	12.1
Understand that the interview may be an educational opportunity	T, C, I, M, E	1	12.10
Recognise the importance of preparation when breaking bad news by: • Setting aside sufficient uninterrupted time • Choosing an appropriate private environment • Having sufficient information regarding prognosis and treatment	T, C, I, E	1	8.2 12.1

• Structuring the interview • Being honest, factual, realistic and empathic Being aware of relevant guidance documents			
Understand that "bad news" may be expected or unexpected	T, C, I, E	1	12.1
Recognise that sensitive communication of bad news is an essential part of professional practice	T, C, I, E	1	12.1
Understand that "bad news" has different connotations depending on the context, individual, social and cultural circumstances	T, C, I, E	1	12.1
Recall that a post mortem examination may be required and understand what this involves	T, C, I, E	1	8.2 12.1
Recall the local organ retrieval process	T, C, I	1	8.4 8.5
Skills			
Demonstrate to others good practice in breaking bad news	C, D, M, E	1, 3	12.1
Involve patients and carers in decisions regarding their future management	C, D, M, E	1, 3, 4	12.1
Encourage questioning and ensure comprehension	C, D, M, E	1, 3	12.1
Respond to verbal and visual cues from patients and relatives	C, D, M, E	1, 3	12.1
Act with empathy, honesty and sensitivity avoiding undue optimism or pessimism	C, D, M, E	1, 3	12.1
Structure the interview e.g. • Set the scene • Establish understanding Discuss; diagnosis, implications, treatment, prognosis and subsequent care	C, D, M, E	1, 3	12.1 8.2
Behaviours			
Take leadership in breaking bad news	C, D, M		8.2
Respect the different ways people react to bad news	C, D, M		8.2 12.1

Level Descriptor	
1	Recognises when bad news must be imparted. Recognises the need to develop specific skills. Requires guidance to deal with most cases
2	Able to break bad news in planned settings. Prepares well for interview. Prepares patient to receive bad news. Responsive to patient reactions
3	Able to break bad news in unexpected and planned settings. Clear structure to interview. Establishes what patient wants to know and ensures understanding. Able to conclude interview
4	Skilfully delivers bad news in any circumstance including adverse events. Arranges follow up as appropriate. Able to teach others how to break bad news

2.13 Complaints and medical error

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Basic consultation techniques and skills described for Foundation programme and to include: • Define the local complaints procedure • Recognise factors likely to lead to complaints (poor communication, dishonesty etc) • Adopt behaviour likely to prevent complaints	C, D, M	1	11.4

• Dealing with dissatisfied patients or relatives • Recognise when something has gone wrong and identify appropriate staff to communicate this with • Act with honesty and sensitivity in a non-confrontational manner			
Outline the principles of an effective apology	C, D, M	1	11.4
Identify sources of help and support when a complaint is made about yourself or a colleague	C, D, M	1	11.4
Skills			
Contribute to processes whereby complaints are reviewed and learned from	C, D, M	1	11.4
Explain comprehensibly to the patient the events leading up to a medical error	C, D, M	1, 3	11.4
Deliver an appropriate apology	C, D, M	1, 3, 4	11.4
Distinguish between system and individual errors	C, D, M	1	11.4
Show an ability to learn from previous error	C, D, M	1	12.13
Behaviours			
Take leadership over complaint issues	C, D, M	1	11.4
Recognise the impact of complaints and medical error on staff, patients, and the National Health Service	C, D, M	1, 3	11.4
Contribute to a fair and transparent culture around complaints and errors	C, D, M	1	11.4
Recognise the rights of patients, family members and carers to make a complaint	C, D, M	1, 4	11.4

Level Descriptor	
1	Defines 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

2.14 Communications with colleagues and cooperation

Recognise and accept the responsibilities and role of the doctor in relation to other healthcare professionals.
Communicate succinctly and effectively with other professionals as appropriate

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Understand the section in "Good Medical Practice" on Working with Colleagues, in particular:	C, M	1	12.7
The roles played by all members of a multi-disciplinary team	C, M	1	12.7
The features of good team dynamics	C, M	1	12.7
The principles of effective inter-professional collaboration to optimise patient, or population, care	C, M	1	12.7
Skills			
Communicate 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	T, C, I	1, 3	12.2
Utilise the expertise of the whole multi-disciplinary team as appropriate, ensuring when delegating responsibility that appropriate supervision is maintained	T, C, I, M	1, 3	12.7
Participate in, and co-ordinate, an effective hospital at night team when relevant	T, C, I, M	1	12.7
Communicate effectively with administrative bodies and support organisations	C, I, M	1, 3	11.8
Employ behavioural management skills with colleagues to prevent and resolve conflict	T, C, I, M	1, 3	12.2
Behaviours			

Be aware of the importance of, and take part in, multi-disciplinary work, including adoption of a leadership role when appropriate	T, C, I, M	3	12.7
Foster a supportive and respectful environment where there is open and transparent communication between all team members	T, C, I, M	1, 3	12.2
Ensure appropriate confidentiality is maintained during communication with any member of the team	T, C, I, M	1, 3	12.6
Recognise 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	C, I, M	1	12.11
Be prepared to accept additional duties in situations of unavoidable and unpredictable absence of colleagues	C, M	1	12.11

Level Descriptor	
1	Accepts his/her role in the healthcare team and communicates appropriately with all relevant members thereof
2	Fully recognises the role of, and communicates appropriately with, all relevant potential team members (individual and corporate)
3	Able to predict and manage conflict between members of the healthcare team
4	Able to take a leadership role as appropriate, fully respecting the skills, responsibilities and viewpoints of all team members

2.15 Health promotion and public health

Awareness of public health issues and health promotion; many patients admitted to critical care are suffering the consequences of their lifestyle choices.
To progressively 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.

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Understand the factors which influence the incidence of and prevalence of common conditions	C, M, E	1	3.1
Understand the factors which influence health – psychological, biological, social, cultural and economic especially poverty	C, I	1	3.2
Understand the influence of lifestyle on health and the factors that influence an individual to change their lifestyle	C, I	1	12.1
Understand the purpose of screening programmes and know in outline the common programmes available within the UK	C, I	1	11.7
Understand the relationship between the health of an individual and that of a community	C, I	1	11.8
Know the key local concerns about health of communities such as smoking and obesity	C, I	1	11.8
Understand the role of other agencies and factors including the impact of globalisation in protecting and promoting health	C, I	1	11.8
Demonstrate 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	C, I	1	11.8
Outline the major causes of global morbidity and mortality and effective, affordable interventions to reduce these	C, I	1	11.8
Recall the effect of addictive behaviours, especially substance misuse and gambling, on health and poverty	C, I	1	11.8
Skills			
Identify opportunities to prevent ill health and disease in patients	C, I, E	1, 2	11.8
Identify opportunities to promote changes in lifestyle and other actions which will positively improve health	C, I, E	1, 2	11.8
Identify the interaction between mental, physical and social wellbeing in relation to health	C, I, E	1	11.8
Counsel patients appropriately on the benefits and risks of screening	C, I, E	1, 3	12.1

Work collaboratively with other agencies to improve the health of communities	C, I	1	12.2
Behaviours			
Engage in effective team-working around the improvement of health	C, M	1, 3	12.7
Encourage where appropriate screening to facilitate early intervention	C	1	11.8

Level Descriptor	
1	Discuss with patients and others factors which could influence their personal health. Maintains own health is aware of own responsibility as a doctor for promoting healthy approach to life
2	Communicate to an individual, information about the factors which influence their personal health. Support an individual in a simple health promotion activity (e.g. smoking cessation)
3	Communicate to an individual and their relatives, information about the factors which influence their personal health. Support small groups in a simple health promotion activity (e.g. smoking cessation). Provide information to an individual about a screening programme and offer information about its risks and benefits
4	Discuss with small groups the factors that have an influence on their health and describe initiatives they can undertake to address these. Provide information to an individual about a screening programme offering specific guidance in relation to their personal health and circumstances concerning the factors that would affect the risks and benefits of screening to them as an individual. Engage with local or regional initiatives to improve individual health and reduce inequalities in health between communities

Legal and ethical context of ICM practice

The legal and ethical framework associated with healthcare must be a vital part of the practitioner's competencies if safe practice is to be sustained. Within this the ethical aspects of research must be considered. The competencies associated with these areas of practice are defined in the following section.

2.16 Principles of medical ethics and confidentiality			
To know, understand and apply appropriately the principles, guidance and laws regarding medical ethics and confidentiality			
Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Demonstrate knowledge of the principles of medical ethics	T, C, I, E	1	12.7
Outline and follow the guidance given by the GMC on confidentiality	T, C, I, E	1	12.6
Define the provisions of the Data Protection Act and Freedom of Information Act	T, C, I	1	12.3
Define the role of the Caldicott Guardian within an institution, and outline the process of attaining Caldicott approval for audit or research	T, C, I	1, 4	12.3
Outline situations where patient consent, while desirable, is not required for disclosure e.g. communicable diseases, public interest	T, C, I	1, 4	12.4
Outline the procedures for seeking a patient's consent for disclosure of identifiable information	T, C, I	1	12.4
Recall the obligations for confidentiality following a patient's death	T, C, I	1, 4	12.6
Recognise the problems posed by disclosure in the public interest, without patient's consent	T, C, I	1, 4	12.6
Recognise the factors influencing ethical decision making: religion, moral beliefs, cultural practices	T, C, I, E	1	12.5
Do not resuscitate: Define the standards of practice defined by the GMC when deciding to withhold or withdraw life-prolonging treatment	T, C, I	1	8.1
Advance directives	T, C	3, 4	8.1
Outline the principles of the Mental Capacity Act	T, C, I	1	12.12
Skills			

Use and share information with the highest regard for confidentiality, and encourage such behaviour in other members of the team	T, C, I, M	1, 2,3	12.6
Use and promote strategies to ensure confidentiality is maintained e.g. anonymisation	C	1	12.6
Counsel patients on the need for information distribution within members of the immediate healthcare team	T, C, M, E	1, 3	12.1
Counsel patients, family, carers and advocates tactfully and effectively when making decisions about resuscitation status, and withholding or withdrawing treatment	T, C, I, E	1, 3	8.1
Behaviours			
Encourage ethical reflection in others	T, C, M	1	12.12
Show willingness to seek advice of peers, legal bodies, and the GMC in the event of ethical dilemmas over disclosure and confidentiality	T, C, I, M, E	1	12.4
Respect patient's requests for information not to be shared, unless this puts the patient, or others, at risk of harm	T, C, I, E	1, 4	12.4
Show willingness to share information about their care with patients, unless they have expressed a wish not to receive such information	T, C, I	1, 3	12.1
Show willingness to seek the opinion of others when making decisions about resuscitation status, and withholding or withdrawing treatment	T, C, I, M	1, 3	8.1

Level Descriptor	
1	Use and share information with the highest regard for confidentiality adhering to the Data Protection Act and Freedom of Information Act in addition to guidance given by the GMC. Familiarity with the principles of the Mental Capacity Act. Participate in decisions about resuscitation status and withholding or withdrawing treatment
2	Counsel patients on the need for information distribution within members of the immediate healthcare team and seek patients' consent for disclosure of identifiable information
3	Define the role of the Caldicott Guardian within an institution, and outline the process of attaining Caldicott approval for audit or research
4	Able to assume a full role in making and implementing decisions about resuscitation status and withholding or withdrawing treatment

2.17 Valid consent

To obtain valid consent from the patient

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Outline the guidance given by the GMC on consent, in particular: • Understand that consent is a process that may culminate in, but is not limited to, the completion of a consent form • Understand 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	C, D, M	1	12.4
Skills			
Present all information to patients (and carers) in a format they understand, allowing time for reflection on the decision to give consent	T, C, I, E	1, 3	12.1
Provide a balanced view of all care options	T, C, I, E	1, 3, 4	12.1
Behaviours			
Respect a patient's rights of autonomy even in situations where their decision might put them at risk of harm	T, C, I, E	1	12.4
Avoid exceeding the scope of authority given by a patient	T, C, I	1	12.4
Avoid withholding information relevant to proposed care or treatment in a competent adult	T, C, I, E	1, 3, 4	12.1
Show willingness to seek advance directives	T, C, I, E	1, 3	8.2
Show willingness to obtain a second opinion, senior opinion, and legal advice in difficult situations of consent or capacity	T, C, I, M, E	1, 3	12.1

Inform a patient and seek alternative care where personal, moral or religious belief prevents a usual professional action	T, C, I	1, 3, 4	12.5

Level Descriptor	
1	Obtains consent for straightforward treatments with appropriate regard for patient's autonomy
2	Able to explain complex treatments meaningfully in layman's terms and thereby to obtain appropriate consent
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

2.18 Legal framework for practice

To understand the legal framework within which healthcare is provided in the UK in order to ensure that personal clinical practice is always provided in line with this legal framework

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
All decisions and actions must be in the best interests of the patient	T, C, I, E	1	12.12
Understand the legislative framework within which healthcare is provided in the UK – 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	T, C, I	1, 2	11.8
Understand the differences between legislation in the four countries of the UK	C	1	12.12
Understand sources of medical legal information	T, C, I	1	12.12
Understand disciplinary processes in relation to medical malpractice	T, C, I, M	1	11.8
Understand 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	T, C, I, M	1	11.8
Skills			
Ability to cooperate with other agencies with regard to legal requirements – including reporting to the Coroner's Office or the proper officer of the local authority in relevant circumstances	T, C, I	1	11.8
Ability to prepare appropriate medical legal statements for submission to the Coroner's Court, Procurator Fiscal, Fatal Accident Inquiry and other legal proceedings	C, M	1	11.8
Be prepared to present such material in Court	C, I	1	11.8
Incorporate legal principles into day to day practice	T, C, I	1	12.12
Practice and promote accurate documentation within clinical practice	T, C, I	1, 3	12.3
Behaviours			
Show willingness to seek advice from the Healthcare Trust, legal bodies (including defence unions), and the GMC on medico-legal matters	T, C, I, M	1	11.8
Promote reflection on legal issues by members of the team	T, C, I, M	1, 3	12.12

Level Descriptor	
1	Demonstrates knowledge of the legal framework associated with medical qualification and medical practice and the responsibilities of registration with the GMC. Demonstrates knowledge of the limits to professional capabilities - particularly those of pre-registration doctors.
2	Identify with Senior Team Members cases which should be reported to external bodies and where appropriate and initiate that report. Identify with Senior Members of the Clinical Team situations where you feel consideration of medical legal matters may be of benefit. Be aware of local Trust procedures around substance abuse and clinical malpractice.

3	Work with external strategy bodies around cases that should be reported to them. Collaborating with them on complex cases preparing brief statements and reports as required. Actively promote discussion on medical legal aspects of cases within the clinical environment. Participate 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	Work with external strategy bodies around cases that should be reported to them. Collaborating with them on complex cases providing full medical legal statements as required and present material in Court where necessary. Lead the clinical team in ensuring that medical legal factors are considered openly and consistently wherever appropriate in the care of a patient. Ensuring that patients and relatives are involved openly in all such decisions.

2.19 Ethical research

To ensure that research is undertaken using relevant ethical guidelines

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Outline the GMC guidance on good practice in research	T, C	1	12.15
Outline the differences between audit and research	Audit, C, I	1	12.15
Describe how clinical guidelines are produced	C	1	11.6
Demonstrate a knowledge of research principles	C, I	1	12.15
Outline the principles of formulating a research question and designing a project	C, I	1	12.15
Comprehend principal qualitative, quantitative, bio-statistical and epidemiological research methods	C	1	Basic Sciences
Outline sources of research funding	C	1	12.15
Skills			
Develop critical appraisal skills and apply these when reading literature	C	1	11.6
Demonstrate the ability to write a scientific paper	C	1	12.15
Apply for appropriate ethical research approval	C	1	12.15
Demonstrate the use of literature databases	C	1	12.15
Demonstrate good verbal and written presentations skills	C, D	1	12.3
Understand the difference between population-based assessment and unit-based studies and be able to evaluate outcomes for epidemiological work	C	1	11.6
Behaviours			
Recognise the ethical responsibilities to conduct research with honesty and integrity, safeguarding the interests of the patient and obtaining ethical approval when appropriate	C, M	1	12.12
Follow guidelines on ethical conduct in research and consent for research	C	1	12.15
Show willingness to the promotion of involvement in research	C	1	12.15

Level Descriptor	
1	Defines ethical research and demonstrates awareness of GMC guidelines. Differentiates audit and research. Knows how to use databases
2	Demonstrates ability to write a scientific paper. Demonstrates critical appraisal skills
3	Demonstrates ability to apply for appropriate ethical research approval. Demonstrates knowledge of research funding sources. Demonstrates good presentation and writing skills
4	Provides leadership in research. Promotes research activity. Formulates and develops research pathways

Service Development

It is the responsibility of each practitioner to ensure that they are aware of relevant developments in clinical care and also ensure that their practice conforms to the highest standards of practice that may be possible. An awareness of the evidence base behind current practice and a need to audit one's own practice is vital for the intensivist.

2.20 Evidence and guidelines			
To progressively develop the ability to make the optimal use of current best evidence in making decisions about the care of patients To progressively develop the ability to construct evidence based guidelines in relation to medical practise			
Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Understands of the application of statistics in scientific medical practice	E, C	1	Basic Sciences
Understand the advantages and disadvantages of different study methodologies (randomised control trials, case controlled cohort etc)	E, C	1	12.15
Understand the principles of critical appraisal	C	1	11.6
Understand levels of evidence and quality of evidence	E, C	1	11.6
Understand the role and limitations of evidence in the development of clinical guidelines	E, C	1	11.6
Understand the advantages and disadvantages of guidelines	C	1	11.6
Understand the processes that result in nationally applicable guidelines (e.g. NICE and SIGN)	C	1	11.6
Skills			
Ability to search the medical literature including use of PubMed, Medline, Cochrane reviews and the internet	C	1	12.13
Appraise retrieved evidence to address a clinical question	C	1	12.13
Apply conclusions from critical appraisal into clinical care	E, C	1	11.6
Identify the limitations of research	C	1	12.15
Contribute to the construction, review and updating of local (and national) guidelines of good practice using the principles of evidence based medicine	C	1	11.6
Behaviours			
Keep up to date with national reviews and guidelines of practice (e.g. NICE and SIGN)	E, C	1	12.13
Aim for best clinical practice (clinical effectiveness) at all times, responding to evidence based medicine	T, C, I	1	11.6
Recognise the occasional need to practise outside clinical guidelines	T, C, I	1	11.6
Encourage discussion amongst colleagues on evidence-based practice	T, C, I, M	1	12.13

Level Descriptor	
1	Participate in departmental or other local journal club. Critically review an article to identify the level of evidence
2	Lead in a departmental or other local journal club. Undertake a literature review in relation to a clinical problem or topic
3	Produce a review article on a clinical topic, having reviewed and appraised the relevant literature
4	Perform a systematic review of the medical literature. Contribute to the development of local or national clinical guidelines

2.21 Quality Improvement			
To progressively develop the ability to perform a quality improvement project of clinical practice and to apply the findings appropriately			
Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Understand the different methods of obtaining data for quality improvement projects including patient feedback questionnaires, hospital sources and national reference data	QI project, C	1	12.15
Understand the role of quality improvement (developing patient care, risk management etc)	QI project, C	1	12.15
Understand the steps involved in completing a quality improvement project	QI project, C	1	12.15
Understands the working and uses of national and local databases used for audit such as specialty data collection systems, cancer registries etc. The working and uses of local and national systems available for reporting and learning from clinical incidents and near misses in the UK	Audit, C	1	11.7
Skills			
Design and implement a quality improvement project	QI project, C	1, 2	12.15
Contribute to local and national quality improvement projects as appropriate (e.g. NCEPOD, SASM)	QI project, C	1, 2	11.7
Support quality improvement projects by junior medical trainees and within the multi-disciplinary team	QI projects, C	1, 2	12.15
Behaviours			
Recognise the need for quality improvement projects in clinical practice to promote standard setting and quality assurance	QI projects, C	1, 2	12.15

Level Descriptor	
1	Attendance at departmental quality improvement meetings. Contribute data to a local or national quality improvement project
2	Identify a problem and develop standards for a local audit
3	Compare the results of a quality improvement project with criteria or standards to reach conclusions. Use the findings of a quality improvement project to develop and implement change. Organise or lead a departmental quality improvement meeting
4	Lead a complete clinical quality improvement project including development of conclusions, and assessment of the effectiveness of the implemented changes. Become quality improvement lead for an institution or organisation

Teaching and training

A good intensivist will ensure that the knowledge possessed is communicated effectively. In the formal setting of teaching and training specific competencies will have to be acquired to ensure that the practitioner recognises the best practise and techniques.

2.22 Teaching and training			
To progressively develop the ability to teach to a variety of different audiences in a variety of different ways To progressively be able to assess the quality of the teaching To progressively be able to train a variety of different trainees in a variety of different ways To progressively be able to plan and deliver a training programme with appropriate assessments			
Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Outline adult learning principles relevant to medical education:	C	1	12.14
Identification of learning methods and effective learning environments	C	1	12.14

Construction of educational objectives	C	1	12.14
Use of effective questioning techniques	C	1	12.13
Varying teaching format and stimulus	C	1	12.14
Demonstrate knowledge of relevant literature relevant to developments in medical education	C	1	12.13
Outline the structure of the effective appraisal interview	C	1	12.10
Define the roles to the various bodies involved in medical education	C	1	12.14
Differentiate between appraisal and assessment and aware of the need for both	C	1	12.10
Outline the workplace-based assessments in use and the appropriateness of each	C	1	12.13
Demonstrate the definition of learning objectives and outcomes	C	1	12.13
Outline the appropriate local course of action to assist the failing trainee	C	1	12.11
Skills			
Vary teaching format and stimulus, appropriate to situation and subject	C	1	12.14
Provide effective feedback after teaching, and promote learner reflection	C, M	1	12.14
Conduct effective appraisal	C, M	1	12.14
Demonstrate effective lecture, presentation, small group and bed side teaching sessions	C, M	1, 3	12.14
Provide appropriate career advice, or refer trainee to an alternative effective source of career information	C, M	1, 3	12.14
Participate in strategies aimed at improving patient education e.g. talking at support group meetings	C, M	1	12.4
Be able to lead departmental teaching programmes including journal clubs	C	1	12.14
Recognise the failing trainee	C	1	12.14
Behaviours			
In discharging educational duties acts to maintain the dignity and safety of patients at all times	C, M	1, 4	12.6 12.11
Recognise 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	C, M	1	12.14
Balances the needs of service delivery with the educational imperative	C, M	1	11.8
Demonstrate willingness to teach trainees and other health and social workers in a variety of settings to maximise effective communication and practical skills	C, M	1, 3	12.14
Encourage discussions in the clinical settings to colleagues to share knowledge and understanding	C, M	1	12.14
Maintain honesty and objectivity during appraisal and assessment	C, M	1	12.9
Show willingness to participate in workplace-based assessments	C, M	1, 3	12.13
Show willingness to take up formal tuition in medical education and respond to feedback obtained after teaching sessions	C, M	1	12.14
Demonstrates a willingness to become involved in the wider medical education activities and fosters an enthusiasm for medical education activity in others	C, M	1	12.14
Recognise the importance of personal development as a role model to guide trainees in aspects of good professional behaviour	C, M	1	12.13
Demonstrates consideration for learners including their emotional, physical and psychological well being with their development needs	C, M	1	12.14

Level Descriptor	
1	Develops basic PowerPoint presentation to support educational activity Delivers small group teaching to medical students, nurses or colleagues Able to seek and interpret simple feedback following teaching
2	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 feedback
3	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

Self Governance

The individual practitioner has to have appropriate attitudes and behaviours that help deal with complex situations and to work effectively providing leadership and working as part of the healthcare team

2.23 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			
Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Recall and build upon the competencies defined in the Foundation Programme: • Deal with inappropriate patient and family behaviour • Respect the rights of children, elderly, people with physical, mental, learning or communication difficulties • Adopt an approach to eliminate discrimination against patients from diverse backgrounds including age, gender, race, culture, disability, spirituality and sexuality • Place needs of patients above own convenience • Behave with honesty and probity • Act with honesty and sensitivity in a non-confrontational manner • The main methods of ethical reasoning: casuistry, ontology and consequentialist • The overall approach of value based practice and how this relates to ethics, law and decision-making	T, C, I, M	1, 2, 3, 4	12
Define the concept of modern medical professionalism	C	1	12
Outline the relevance of professional bodies (Royal Colleges, Faculty ICM, GMC, Postgraduate Dean, BMA, specialist societies, medical defence organisations)	C	1	11.8
Skills			
Practise with: • integrity • compassion • altruism • continuous improvement • excellence • respect of cultural and ethnic diversity regard to the principles of equity	T, C, I, M	1, 2, 3, 4	12
Work in partnership with members of the wider healthcare team	T, C, I, M	3	12.7
Liaise with colleagues to plan and implement work rotas	T, M	3	12.7
Promote awareness of the doctor's role in utilising healthcare resources optimally	T, C, I, M	1, 3	11.8
Recognise and respond appropriately to unprofessional behaviour in other	E, T, C	1	12.7
Be able to provide specialist support to hospital and community based services	T, C, M	1	12.7
Be able to handle enquiries from the press and other media effectively	C, D	1, 3	11.8
Behaviours			
Recognise personal beliefs and biases and understand their impact on the delivery of health services	T, C, I, M	1	12.5

Recognise the need to use all healthcare resources prudently and appropriately	T, C, I	1, 2	11.8
Recognise the need to improve clinical leadership and management skill	T, C, I	1	11.8
Recognise situations when it is appropriate to involve professional and regulatory bodies	T, C, I	1	11.8
Show willingness to act as a mentor, educator and role model	T, C, I, M	1	12.14
Be willing to accept mentoring as a positive contribution to promote personal professional development	T, C, I	1	12.14
Participate in professional regulation and professional development	C, I, M	1	12.14
Takes part in 360 degree feedback as part of appraisal	C, M	1, 2, 4	12.14
Recognise the right for equity of access to healthcare	T, C, I	1	11.8
Recognise need for reliability and accessibility throughout the healthcare team	T, C, I, M	1	11.8

Level Descriptor	
1	Works work well within the context of multi-professional teams. Listens well to others and takes other viewpoints into consideration. Supports patients and relatives at times of difficulty e.g. after receiving difficult news. Is polite and calm when called or asked to help
2	Responds to criticism positively and seeks to understand its origins and works to improve. Praises staff when they have done well and where there are failings in delivery of care provides constructive feedback. To wherever possible involve patients in decision making
3	Recognises when other staff are under stress and not performing as expected and provides appropriate support for them. Takes action necessary to ensure that patient safety is not compromised
4	Helps patients who show anger or aggression with staff or with their care or situation and works with them to find an approach to manage their problem
5	Is able to engender trust so that staff feel confident about sharing difficult problems and feel able to pointing out deficiencies in care at an early stage

Leadership

Working within the health service there is a need to understand and work within the organisational structures that are set. A significant knowledge of leadership principles and practice as defined in the Medical Leadership Competence Framework is an important part of this competence

2.24 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			
Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Understand the guidance given on management and doctors by the GMC	C	1	11.8
Understand the local structure of NHS systems in your locality recognising the potential differences between the four countries of the UK	T, C	1	11.8
Understand the structure and function of healthcare systems as they apply to your specialty	T, C	1	11.8
Understand 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	C	1	11.8
Understand the importance of local demographic, socio-economic and health data and the use to improve system performance	C	1	11.8
Understand the principles of: • Clinical coding • European Working Time Regulations • National Service Frameworks • Health regulatory agencies (e.g., NICE, Scottish Government)	T, C, I	1	11.8

• NHS Structure and relationships • NHS finance and budgeting • Consultant contract and the contracting process • Resource allocation • The role of the Independent sector as providers of healthcare			
Understand the principles of recruitment and appointment procedures	C	1	11.8
Skills			
Participate in managerial meetings	T, C	1	11.8
Take an active role in promoting the best use of healthcare resources	T, C, I	1	11.8
Work with stakeholders to create and sustain a patient-centred service	T, C, I	1	11.8
Employ new technologies appropriately, including information technology	T, C, I	1	12.13
Behaviours			
Recognise the importance of just allocation of healthcare resources	C	1, 2	12.12
Recognise the role of doctors as active participants in healthcare systems	T, C, I	1, 2	11.8
Respond appropriately to health service targets and take part in the development of services	T, C, I	1, 2	12.13
Recognise the role of patients and carers as active participants in healthcare systems and service planning	T, C, I	1, 2, 3	12.1
Show willingness to improve managerial skills (e.g. management courses) and engage in management of the service	C, M	1	11.8

Level Descriptor	
1	Describes in outline the roles of primary care, including general practice, public health, community, mental health, secondary and tertiary care services within healthcare. Describes the roles of members of the clinical team and the relationships between those roles. Participates fully in clinical coding arrangements and other relevant local activities.
2	Can describe in outline the roles of primary care, community and secondary care services within healthcare. Can describe the roles of members of the clinical team and the relationships between those roles. Participates fully in clinical coding arrangements and other relevant local activities.
3	Can describe the relationship between PCTs/Health Boards, General Practice and Trusts including relationships with local authorities and social services. Participate in team and clinical directorate meetings including discussions around service development. Discuss the most recent guidance from the relevant health regulatory agencies in relation to the specialty.
4	Describe the local structure for health services and how they relate to regional or devolved administration structures. Be able to discuss funding allocation processes from central government in outline and how that might impact on the local health organisation. Participate fully in clinical directorate meetings and other appropriate local management structures in planning and delivering healthcare within the specialty. Participate as appropriate in staff recruitment processes in order to deliver an effective clinical team. Within the Directorate collaborate with other stake holders to ensure that their needs and views are considered in managing services.

3. Core Anaesthetic Competencies

Knowledge and skills in areas of anaesthetic practice are essential for a competent intensivist. Whilst these skills can be learned in the intensive care environment, the volume of cases is such that expertise will be difficult to achieve. The trainee intensivist must undertaken an attachment of no less than 12 months in anaesthesia within the first 4 years of ICM training to develop the necessary skills of induction of anaesthesia, airway control, management of acutely unwell patients, care of the unconscious patient and surgical patient management. These skills are core to the safe practice of intensive care medicine and trainees who are not also training towards dual CCTs in anaesthesia and ICM will be expected to demonstrate maintenance of these skills throughout their training and throughout their professional life.

Trainees will be attached to anaesthesia departments and being assessed against the Anaesthesia Curriculum (2010), all these elements are contained within the CoBaTrICE scheme and are mapped below but for clarity for both trainees and trainers the relevant competencies are included in this Curriculum.

Induction of anaesthesia and airway management are fundamental components of respiratory support and a prelude to further organ support in many critically ill patients. Emergency anaesthesia provides an opportunity to develop competence and ultimately expertise in the management of these aspects of care for the acutely ill patient in ICU.

Whilst the relevance of some areas of competence such as gynaecology lists may not be immediately apparent surgical specialties with a high throughput of often otherwise fit patients provide an opportunity to develop a degree of independence in the relevant skills.

3.1 Control of infection

Learning Outcomes:

- To understand the need for infection control processes.
- To understand types of possible infections contractible by patients in the clinical setting.
- To understand and apply most appropriate treatment for contracted infection.
- To understand the risks of infection and be able to apply mitigation policies and strategies

Core clinical learning outcome:

- The acquisition of good working practices in the use of aseptic techniques

	Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge				
IF_BK_01	Identifies the universal precautions and good working practices for the control of infection including but not limited to: • Decontaminate hands before treating patients. When soap and water hand wash is appropriate. When alcohol gel decontamination is appropriate • The use of gloves • The use of sterilised equipment • The disposal of used clinical consumables (single use and reusable)	I, C, D, E	1, 2	11.2
IF_BK_02	Lists the types and treatment of infections contracted by patients usually in the ward and ITU, including but not limited to: • MRSA • C Diff	C, E	1	2.5
IF_BK_03	Recalls/discusses the concept of cross infection including: • Modes of cross infection • Common cross infection agents	I, C, E	1	2.5
IF_BK_04	Recalls/explains the dynamics of bacterial and viral strain mutation and the resulting resistance to antibiotic treatment	C, E	1	2.5

IF_BK_05	Explains the need for antibiotic policies in hospitals	C, E	1, 2	2.5
IF_BK_06	Recalls/discusses the cause and treatment of common surgical infections including the use of but not limited to: • Antibiotics • Prophylaxis	C, E	1	2.5 3.9
IF_BK_07	Recalls/lists the types of infection transmitted through contaminated blood including but not limited to: • HIV • Hepatitis B and C	C, E	1	4.3
IF_BK_08	Discusses the need for, and application of, hospital immunisation policies	C, E	1	11.8
IF_BK_09	Recalls/explains the need for, and methods of, sterilisation	C, E	1	11.2
IF_BK_10	Explains the Trust's decontamination policy and their application	C	1	11.3
Skills				
IF_BS_01	Identifies patients at risk of infection and applies an infection mitigation strategy	I, D	1	3.9
IF_BS_02	Identifies and appropriately treats the immunocompromised patient	I, C	1, 4	3.1
IF_BS_03	Be able to administer IV antibiotics taking into account and not limited to: • Risk of allergy • Anaphylaxis	I, D	1, 2	4.2
IF_BS_04	Demonstrates good working practices, following local infection control protocols and the use of aseptic techniques	I, D, M	1, 2	11.2
IF_BS_05	Demonstrates the correct use of disposable filters and breathing systems	I, D, M	1	11.2
IF_BS_06	Demonstrates the correct use and disposal of protective clothing items including but not limited to: • Surgical scrubs • Masks • Gloves	I, D, M	1, 2	11.2
IF_BS_07	Demonstrates the correct disposal of clinical consumable items (single use and reusable)	I, D, M	1, 2	11.2

3.2 Preoperative Assessment

Core clinical learning outcomes:

- Is able to perform a structured preoperative anaesthetic assessment of a patient prior to surgery and recognise when further assessment/optimisation is required prior to commencing anaesthesia/surgery;
- To be able to explain options and risks of routine anaesthesia to patients, in a way they understand, and obtain their consent for anaesthesia

In addition to the Common Competencies of History Taking and Examination specific anaesthetic assessment is required.

Specific Anaesthetic Evaluation

This training will:

- Develop the ability to establish a problem list
- Develop the ability to judge whether the patient is fit for and optimally prepared for the proposed intervention
- Develop the ability to plan anaesthesia and postoperative care for common surgical procedures
- Develop the ability to recognise the trainees limitations and reliably determine the level of supervision they will need
- Ensure trainees can explain options and risks of routine anaesthesia to patients, in a way they understand, and obtain their consent for anaesthesia

	Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge				
OA_BK_01	Knows the methods of anaesthesia that are suitable for common operations in the surgical specialties for which they have anaesthetised. Typical experience at this early stage of training will be in: • General surgery • Gynaecology • Urology • Orthopaedic surgery • ENT • Dental	I, C, E	1, 2	6.1
OA_BK_02	Describes the ASA and NCEPOD classifications and their implications in preparing for and planning anaesthesia	I, C, E	1	6.1
OA_BK_03	Explains the indications for and interpretation of preoperative investigations	I,C,E	1	2.2
OA_BK_04	Lists the indications for preoperative fasting and understand appropriate regimens	I, C, E	1	6.1
OA_BK_05	Explains the methods commonly used for assessing the airway to predict difficulty with tracheal intubation	I, C, E	1, 2	5.2
OA_BK_06	Discusses the indications for RSI	I, C, D, E	1, 2	5.2
OA_BK_07	Gives examples of how common co-existing diseases affect anaesthesia and surgery including but not exclusively: obesity; diabetes; asthma; ischaemic heart disease; hypertension and rheumatoid disease; epilepsy	I, C, E	1	3.2
OA_BK_08	Discusses how to manage drug therapy for co-existing disease in the perioperative period including, but not exclusively: obesity; diabetic treatment; steroids; anti-coagulants; cardiovascular medication; epilepsy	I, C, E	1	4.1
OA_BK_09	Explains the available methods to minimise the risk of thrombo-embolic disease following surgery	I, C, E	1, 2	11.4
OA_BK_10	Knows about the complications of anaesthetic drugs [including anaphylaxis, suxamethonium apnoea and malignant hyperpyrexia] and how to predict patients who are at increased risk of these complications	I, C, E	1, 2	3.1
OA_BK_11	Identifies the principles of consent for surgery and anaesthesia, including the issue of competence	I, C, E	3, 4	6.1
OA_BK_12	Explains the guidance given by the GMC on consent, in particular: • Understands that consent is a process that may culminate in, but is not limited to, the completion of a consent form • 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 consent	I, C, E	3, 4	6.1
OA_BK_13	Summarises the factors determining a patient's suitability for treatment as an ambulant or day-stay patient	I, C, E	1	
OA_BK_14	Recalls/lists the factors that affect the risk of a patient suffering PONV	I, C, E	1	6.1
Skills				
OA_BS_01	Demonstrates satisfactory proficiency in obtaining a history specifically relevant to the planned anaesthesia and surgery including: • A history of the presenting complaint for surgery • A systematic comprehensive relevant medical history • Information about current and past medication • Drug allergy and intolerance • Information about previous anaesthetics and relevant family history	A, D, E	1	2.1

OA_BS_02	Demonstrates satisfactory proficiency in performing a relevant clinical examination including when appropriate: • Cardiovascular system • Respiratory system • Central and peripheral nervous system: GCS, peripheral deficit • Musculoskeletal system: patient positioning, neck stability/movement, anatomy for regional blockade • Other: nutrition, anaemia, jaundice • Airway assessment/dentition	I, D, E	1	2.1
OA_BS_03	Demonstrates understanding of clinical data including, but not exclusively: • Patient clinical case notes and associated records • Clinical parameters such as: o BP, Pulse, CVP o BMI • Fluid balance • Physiological investigations such as: o ECGs o Echocardiography and stress testing o Pulmonary function tests	I, C, E	1	2.2
OA_BS_04	Demonstrates understanding of clinical laboratory data including: • Haematology such as o Routine report of Hb, WBC, haematocrit etc • Biochemistry such as o Arterial blood gases/acid-base balance o Urea and electrolytes o Liver function o Thyroid function	I, C, E	1	2.2
OA_BS_05	Identifies normal appearances and significant abnormalities in radiographs including: • Chest X-rays • Trauma films – cervical spine, chest, pelvis, long bones • Head CT and MRI showing clear abnormalities	A, C, E	1	2.6
OA_BS_06	Makes appropriate plans for surgery: • Manages co-existing medicines in the perioperative period • Plans an appropriate anaesthetic technique(s) • Secures consent for anaesthesia • Recognises the need for additional work-ups and acts accordingly • Discusses issues of concern with relevant members of the team • Reliably predicts the level of supervision they will require	A, C, E	1	6.1
OA_BS_07	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	A, M	3, 4	12.1
OA_BS_08	Provides a balanced view of all care options	A, C, E, M	2, 3	12.4

3.3 Premedication

Note: This forms part of the comprehensive pre-assessment of patients. Assessment is best included as part of the overall assessment of this process.

Learning outcomes:

- Understands the issues of preoperative anxiety and the ways to alleviate it
- Understands that the majority of patients do not require pre-medication
- Understands the use of preoperative medications in connection with anaesthesia and surgery

Core clinical learning outcome:

- Is able to prescribe premedication as and when indicated, especially for the high risk population

	Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Skills				
PD_BS_01	Selects and prescribes appropriate agents to reduce the risk of regurgitation and aspiration, in timeframe available	A, C, D, E	1, 2	6.1
PD_BS_02	Explains, in a way the patient understands, the benefits and possible risks of sedative premedication	A, E, M	3, 4	7.3
PD_BS_03	Selects and prescribes appropriate anxiolytic/sedative premedication when indicated	A, C, E	1	7.3

3.4 Induction of general anaesthesia

The use of simulators may assist in the teaching and assessment of some aspects of this section e.g. failed intubation drill

Learning outcomes:

- The ability to conduct safe induction of anaesthesia in ASA grade 1-2 patients confidently
- The ability to recognise and treat immediate complications of induction, including tracheal tube misplacement and adverse drug reactions
- The ability to manage the effects of common co-morbidities on the induction process

Core clinical learning outcomes:

- Demonstrates correct pre-anaesthetic check of all equipment required ensuring its safe functioning (including the anaesthetic machine/ventilator in both the anaesthetic room and theatre if necessary)
- Demonstrates safe induction of anaesthesia, using preoperative knowledge of individual patients co-morbidity to influence appropriate induction technique; shows awareness of the potential complications of process and how to identify and manage them

	Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge				
IG_BK_01	In respect of the drugs used for the induction of anaesthesia: • Recalls/summarises the pharmacology and pharmacokinetics, including doses, interactions and significant side effects of: o Induction agents o Muscle relaxants o Analgesics o Inhalational agents including side effects, interactions and doses • Identifies about the factors that contribute to drug errors in anaesthesia and the systems to reduce them	I, C, D, E	1	Basic Sciences

IG_BK_02	In respect of the equipment in the operating environment: • Describes the basic function of monitors and knows what monitoring is appropriate for induction including consensus minimum monitoring standards and the indications for additional monitoring • Explains the function of the anaesthetic machine including o The basic functions of gas flow o Pre-use checking of the anaesthetic machine o The structural features of the anaesthetic machine that minimise errors o The operation of the anaesthetic ventilator o The function of the anaesthetic vapourisers o The operation of any monitoring equipment that is integral with the anaesthetic machine o Knows how to replenish anaesthetic vapouriser	I, C, D, E	1, 2	2.7
IG_BK_03	In respect of the induction of anaesthesia: • Describes the effect of pre-oxygenation and knows the correct technique for its use • Explains the techniques of intravenous and inhalational induction and understands the advantages and disadvantages of both techniques • Knows about the common intravenous induction agents and their pharmacology • Knows the physiological effects of intravenous induction including the differences between agents • Recalls/explains how to recognise the intra-arterial injection of a harmful substance and its appropriate management • Describes the features of anaphylactic reactions and understands the appropriate management including follow up and patient information • Knows the factors influencing the choice between agents for inhalational induction of anaesthesia • Discusses the additional hazards associated with induction of anaesthesia in unusual places [e.g. Emergency Room] and in special circumstances including but not exclusively: brain injury; full stomach; sepsis; upper airway obstruction • Identifies the special problems of induction associated with cardiac disease, respiratory disease, musculoskeletal disease, obesity and those at risk of regurgitation/pulmonary aspiration.	I, C, D, E	1, 2	Basic Sciences 4.1 6.1
IG_BK_04	Describes the principles of management of the airway including: • Techniques to keep the airway open and the use of facemasks, oral and nasopharyngeal airways and laryngeal mask airways	I, C, D, E	1, 2	5.2 6.1 5.3 5.4

IG_BK_05	In respect of tracheal intubation: • Lists its indications • Lists the available types of tracheal tube and identifies their applications • Explains how to choose the correct size and length of tracheal tube • Explains the advantages/disadvantages of different types of laryngoscopes and blades including, but not exclusively, the Macintosh and McCoy • Outlines how to confirm correct placement of an tracheal tube and knows how to identify the complications of intubation including endobronchial and oesophageal intubation • Discusses the methods available to manage difficult intubation and failed intubation • Explains how to identify patients who are at increased risk of regurgitation and pulmonary aspiration and knows the measures that minimise the risk • Categorises the signs of pulmonary aspiration and the methods for its emergency management	I, C, D, E	1, 2	5.3
IG_BK_06	Explains the importance of maintaining the principles of aseptic practice and minimising the risks of hospital acquired infection	I, C, D, E	2	11.2
Skills				
IG_BS_01	Demonstrates safe practice in checking the patient in the anaesthetic room	I, D	1, 2	11.3
IG_BS_02	Demonstrates appropriate checking of equipment prior to induction, including equipment for emergency use	I, D	1, 2	4.6
IG_BK_03	In respect of the equipment in the operating environment: • Demonstrates understanding of the function of the anaesthetic machine including o Performing proper pre-use checks o Changing/checking the breathing system o Replenishing the vapouriser o Changing the vapouriser	D	1, 2	6.1
IG_BS_04	Demonstrates safe practice in selecting, checking, drawing up, diluting, labelling and administering of drugs	I, D	1, 2, 3	4.1
IG_BS_05	In respect of intravenous cannulation: • Obtains intravascular access using appropriate size cannulae in appropriate anatomical location • Demonstrates rigorous aseptic technique when inserting a cannula	D	1	5
IG_BS_06	In respect of monitoring: • Demonstrates appropriate placement of monitoring, including ECG electrodes and NIBP cuff • Manages monitors appropriately e.g. set alarms; start automatic blood pressure • Demonstrates proficiency in the Interpretation of monitors	I, D	1	2.7
IG_BS_07	Demonstrates effective pre-oxygenation, including correct use of the mask, head position and clear explanation to the patient	I, D	1, 2, 3	5.2
IG_BS_08	In respect of intravenous induction: • Makes necessary explanations to the patient • Demonstrates satisfactory practice in preparing drugs for the induction of anaesthesia • Demonstrates proper technique in injecting drugs at induction of anaesthesia • Manages the cardiovascular and respiratory changes associated with induction of general anaesthesia	I, D	1, 2, 3	6.1

IG_BS_09	In respect of inhalational induction of anaesthesia: • Satisfactorily communicates with the patient during induction • Satisfactorily conducts induction	I, D	1, 2, 3	6.1
IG_BS_10	In respect of airway management: • Demonstrates optimal patient position for airway management • Manages airway with mask and oral/nasopharyngeal airways • Demonstrates hand ventilation with bag and mask • Able to insert and confirm placement of a Laryngeal Mask Airway • Demonstrates correct head positioning, direct laryngoscopy and successful nasal/oral intubation techniques and confirms correct tracheal tube placement • Demonstrates proper use of bougies • Demonstrates correct securing and protection of LMAs/tracheal tubes during movement, positioning and transfer • Correctly conducts RSI sequence • Correctly demonstrates the technique of cricoid pressure	I, D	1, 2, 3	5.2
IG_BS_11	Demonstrates correct use of oropharyngeal, laryngeal and tracheal suctioning	I, D	1, 2	5.4
IG_BS_12	Demonstrates failed intubation drill	D, S	1, 2	5.3

3.5 Intra-operative care

Learning outcomes:

- The ability to maintain anaesthesia for surgery
- The ability to use the anaesthesia monitoring systems to guide the progress of the patient and ensure safety
- Understanding the importance of taking account of the effects that co-existing diseases and planned surgery may have on the progress of anaesthesia
- Recognise the importance of working as a member of the theatre team

Core clinical learning outcome:

- Demonstrates safe maintenance of anaesthesia and shows awareness of the potential complications and how to identify and manage them

Competence		*Assessment Methods*	*GMP*	*CoBaTrICE*
Skills				
IO_BS_01	Demonstrates how to direct the team to safely transfer the patient and position of patient on the operating table and is aware of the potential hazards including, but not exclusively, nerve injury, pressure points, ophthalmic injuries	I, D	1, 2, 3	6.1
IO_BS_02	Manages the intra-operative progress of spontaneously breathing and ventilated patients	I, D	1	6.1
IO_BS_03	Demonstrates the ability to maintain anaesthesia with a face mask in the spontaneously breathing patient	I, D	1, 2	6.1
IO_BS_04	Demonstrates the use of a nerve stimulator to assess the level of neuromuscular blockade	I, D	1	7.3
IO_BS_05	Manages the sedated patient for surgery	I, D	1, 3	7.3
IO_BS_06	Maintains accurate, detailed, legible anaesthetic records and relevant documentation	I, C	1	12.3
IO_BS_07	Demonstrates role as team player and when appropriate leader in the intra-operative environment	I, D, M	2, 3	12.7
IO_BS_08	Communicates with the theatre team in a clear unambiguous style	I, D, M	3	12.7
IO_BS_09	Able to respond in a timely and appropriate manner to events that may affect the safety of patients [e.g. hypotension, massive haemorrhage] [S]	I, C, D, E, M,S	1, 2	1.1

IO_BS_10	Manages common co-existing medical problems [with appropriate supervision] including but not exclusively: • Diabetes • Hypertension • Ischaemic Heart Disease • Asthma and COPD • Patients on steroids	I,C,D	1, 2	3.2

3.6 Postoperative and recovery room care

Learning outcomes:

- The ability to manage the recovery of patients from general anaesthesia
- Understanding the organisation and requirements of a safe recovery room
- The ability to identify and manage common postoperative complications in patients with a variety of co-morbidities
- The ability to manage postoperative pain and nausea
- The ability to manage postoperative fluid therapy

Core clinical learning outcomes:

- Safely manage emergence from anaesthesia and extubation
- Shows awareness of common immediate postoperative complications and how to manage them
- Prescribes appropriate postoperative fluid and analgesic regimes and assessment and treatment of PONV

	Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge				
PO_BK_01	Lists the equipment required in the recovery unit	A,C,E	1	2.7
PO_BK_02	Lists the types of monitoring and the appropriate frequency of observations required for patients having undergone different types of surgery	A,C,E	1	2.7 6.1
PO_BK_03	Describes the care of an unconscious patient in the recovery room, including safe positioning	A,C,D,E	1, 2	6.1
PO_BK_04	In respect of restoring spontaneous respiration and maintaining the airway at the end of surgery: • Explains how to remove the tracheal tube and describes the associated problems and complications • Recalls/describes how to manage laryngospasm at extubation • Recalls/lists the reasons why the patient may not breathe adequately at the end of surgery • Recalls/identifies how to distinguish between the possible causes of apnoea • Lists the possible causes of postoperative cyanosis • Understands how to evaluate neuro-muscular block with the nerve stimulator	I, C, E	1	5.3
PO_BK_05	With respect to oxygen therapy: • Lists its indications • Knows the techniques for oxygen therapy and the performance characteristics of available devices • Recalls/explains the causes and management of stridor	I, C, E	1, 2	5.1
PO_BK_06	Outlines/recalls the principles of appropriate post operative fluid regimes including volumes, types of fluids and monitoring of fluid balance including indications for urethral catheterisation	I, C, E	1	4.4

PO_BK_07	In respect of postoperative pain: • Describes how to assess the severity of acute pain • Knows the 'analgesic ladder' • Discusses how emotions contribute to pain • Identifies appropriate post operative analgesic regimes including types of drugs and doses • Explains how to manage 'rescue analgesia' for the patient with severe pain • Lists the complications of analgesic drugs	I, C, E	1	7.2
PO_BK_08	In respect of PONV: • Accepts fully how distressing this symptom is • Recalls/lists the factors that predispose to PONV • Recalls/describes the basic pharmacology of anti-emetic drugs • Describes appropriate regimes for PONV	I, C, E	1	6.1
PO_BK_09	Recalls/lists the possible causes and management of post operative confusion	I, C, E	1	6.2 6.3
PO_BK_10	Knows the causes and describes the management of post operative hypotension and hypertension	I, C, E	1	6.1
PO_BK_11	Identifies the special precautions necessary for the postoperative management of patients with co-existing diseases including cardiac disease, respiratory disease, metabolic disease, musculoskeletal disease, obesity and those at risk of regurgitation/pulmonary aspiration	I, C, E	1, 2	6.1
PO_BK_12	Explains the prevention, diagnosis and management of postoperative pulmonary atelectasis	I, C, E	1	6.1
PO_BK_13	Lists the appropriate discharge criteria for day stay patients to go home and for patients leaving the recovery room to go to the ward	I, C, E	1	6.1
PO_BK_14	Explains the importance of following up patients in the ward after surgery	I, C, E	1, 2, 3	7.4
Skills				
PO_BS_01	Demonstrates appropriate management of tracheal extubation, including; • Assessment of return of protective reflexes • Assessment of adequacy of ventilation • Safe practice in the presence of a potentially full stomach	I, D	1	5.2
PO_BS_02	Evaluates partial reversal of neuromuscular blockade, including the use of a nerve stimulator	I, D	1, 2	7.3
PO_BS_03	Demonstrates the safe transfer of the unconscious patient from the operating theatre to the recovery room	I, C, D	1, 2	10.1 7.4
PO_BS_04	Demonstrates how to turn a patient into the recovery position	I, D	1	
PO_BS_05	Makes a clear handover to recovery staff of perioperative management and the postoperative plan	I, D, M	1, 3	7.4
PO_BS_06	Prescribes appropriate postoperative fluid regimes	I, C	1	4.4
PO_BS_07	Demonstrates the assessment of postoperative pain and prescribes appropriate postoperative analgesia regimes	I, C, D	1, 3	7.2
PO_BS_08	Demonstrates the assessment and management of postoperative nausea and vomiting	I, C	1	6.1
PO_BS_09	Demonstrates the assessment and management of postoperative confusion	I, C	1	6.1
PO_BS_10	Recognises when discharge criteria have been met for patients going home or to the ward	I, C, D	1, 2, 3	6.1
PO_BS_11	Undertakes follow-up visits to patients after surgery on the ward	I, C, D	1	6.1

3.7 Introduction to anaesthesia for emergency surgery

Learning outcomes:

- Undertake anaesthesia for ASA 1E and 2E patients requiring emergency surgery for common conditions
- Undertake anaesthesia for sick patients and patients with major co-existing diseases, under the supervision of a more senior colleague

Core clinical learning outcome:

- Delivers safe perioperative anaesthetic care to adult ASA 1E and/or 2E patients requiring uncomplicated emergency surgery [e.g. uncomplicated appendicetomy or manipulation of forearm fracture/uncomplicated open reduction and internal fixation] with local supervision

	Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge				
ES_BK_01	Discusses the special problems encountered in patients requiring emergency surgery and how these may be managed including: • Knowing that patients may be very frightened and how this should be managed • Recognising that the patient may have severe pain which needs immediate treatment • Understanding that patients presenting for emergency surgery are more likely to have inadequately treated co-existing disease • Understanding how to decide on the severity of illness in the frightened apprehensive emergency patient • Understanding the pathophysiological changes and organ dysfunction associated with acute illness • How to recognise that the patient may be dehydrated or hypovolaemic and understanding the importance of preoperative resuscitation	I, C, E	1, 2, 3, 4	6.1
ES_BK_02	In respect of the preparation of acutely ill patients for emergency surgery discusses: • How to resuscitate the patient with respect to hypovolaemia and electrolyte abnormalities • The fact that patients may be inadequately fasted and how this problem is managed • The importance of dealing with acute preoperative pain and how this should be managed	I, C, E	1	4.4 4.8
ES_BK_03	Describes how to recognise the 'sick' patient [including sepsis], their appropriate management and the increased risks associated with surgery	I, C, E	1,2	1.1 3.9
ES_BK_04	Understands the airway management in a patient with acute illness who is at risk of gastric reflux	I, C, E	1	5.2
Skills				
ES_BS_01	Manages preoperative assessment and resuscitation/optimisation of acutely ill patients correctly	I, C, D	1, 2, 3, 4	2.1 4.4
ES_BS_02	Demonstrates safe perioperative management of ASA 1 and 2 patients requiring emergency surgery	I, C, D, M	1, 2, 3, 4	6.1
ES_BS_03	Manages rapid sequence induction in the high risk situation of emergency surgery for the acutely ill patient	I, D	1	6.1

3.8 Management of respiratory and cardiac arrest in adults and children

To be gained during the first 6 months of Anaesthetic training

For those who have not completed an ALS/APLS/EPLS course successfully, simulation may be used to assist in the teaching and assessment of these competencies

Learning outcomes:

- To have gained a thorough understanding of the pathophysiology of respiratory and cardiac arrest and the skills required to resuscitate patients
- Understand the ethics associated with resuscitation

Core clinical learning outcome:

- Be able to resuscitate a patient in accordance with the latest Resuscitation Council (UK) guidelines. (Any trainee who has successfully completed a RC(UK) ALS course in the previous year, or who is an ALS Instructor/Instructor candidate, may be assumed to have achieved this outcome).

	Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge				
RC_BK_01	Recalls/lists the causes of a respiratory arrest, including but not limited to: • Drugs, toxins • Trauma • Pulmonary infection • Neurological disorders • Muscular disorders	C, E, S	1	1.2
RC_BK_02	Identifies the causes of a cardiac arrest, including but not limited to: • Ischaemic heart disease • Valvular heart disease • Drugs • Hereditary cardiac disease • Cardiac conduction abnormalities • Electrolyte abnormalities • Electrocution • Trauma • Thromboembolism	C, E, S	1	1.2
RC_BK_03	Demonstrates an understanding of the basic principles of the ECG, and the ability to recognise arrhythmias including but not exclusively: • Ventricular fibrillation • Ventricular tachycardia • Asystole • Rhythms associated with pulseless electrical activity [PEA]	C, E, S	1	2.3
RC_BK_04	Discusses the mode of action of drugs used in the management of respiratory and cardiac arrest in adults and children, including but not limited to: • Adrenaline • Atropine • Amiodarone • Lidocaine • Magnesium sulphate • Naloxone	C, E, S	1	1.2
RC_BK_05	Identifies the doses of drugs, routes given [including potential difficulty with gaining intravenous access and how this is managed] and frequency, during resuscitation from a respiratory or cardiac arrest	C, E, S	1	1.2

RC_BK_06	Explains the physiology underpinning expired air ventilation and external chest compressions	C, E, S	1	1.2 Basic Sciences
RC_BK_07	Explains the need for supplementary oxygen during resuscitation from a respiratory or cardiac arrest in adults and children	C, E, S	1	1.2
RC_BK_08	Lists advantages and disadvantages of different techniques for airway management during the resuscitation of adults and children, including but not limited to: • Oro and nasopharyngeal airways • Laryngeal Mask type supraglottic airways including but not limited to: LMA, Proseal, LMA supreme, iGel • Tracheal intubation	I, C, E, S	1	5.1 5.2
RC_BK_09	Explains the reasons for avoiding hyperventilation during resuscitation	C, E	1	1.2
RC_BK_10	Compares the methods by which ventilation can be maintained in a patient suffering a respiratory or cardiac arrest, using: • Mouth to mask • Self-inflating bag • Anaesthetic circuit • Mechanical ventilator	I, C, E, S	1	1.2
RC_BK_11	Recalls/explains the mechanism of defibrillation and the factors influencing the success of defibrillation	C, E, S	1	1.2
RC_BK_12	Identifies the energies used to defibrillate a patient	C, E, S	1	1.2
RC_BK_13	Recalls/discusses the principles of safely and effectively delivering a shock using both manual and automated defibrillator	C, E, S	1, 2	1.2
RC_BK_14	Explains the need for continuous chest compressions during resuscitation from cardiac arrest once the trachea is intubated	C, E, S	1	1.2
RC_BK_15	Explains the need for minimising interruptions to chest compressions	C, E, S	1	1.2
RC_BK_16	Recalls/discusses the reversible causes of cardiac arrest and their treatment, including but not limited to: • Hypoxia • Hypotension • Electrolyte and metabolic disorders • Hypothermia • Tension pneumothorax • Cardiac tamponade • Drugs and toxins • Coronary or pulmonary thrombosis	C, E, S	1	1.2
RC_BK_17	Recalls/describes the Adult and Paediatric Advanced Life Support algorithms	C, E, S	1	1.2
RC_BK_18	Discusses the specific actions required when managing a cardiac arrest due to: • Poisoning • Electrolyte disorders • Hypo/hyperthermia • Drowning • Anaphylaxis • Asthma • Trauma • Pregnancy [including peri-mortem Caesarean Section] • Electrocution	C, E, S	1	1.2
RC_BK_19	Identifies the signs indicating return of a spontaneous circulation	I, C, E ,S	1	1.2

RC_BK_20	Recalls/lists the investigations needed after recovery from a respiratory or cardiac arrest and describes the potential difficulties with obtaining arterial blood samples and how this may be overcome in these patients	C, E, S	1	1.2
RC_BK_21	Discusses the principles of care required immediately after successful resuscitation from a respiratory or cardiac arrest	C, E, S	1, 3, 4	1.3
RC_BK_22	Discusses the importance of respecting the wishes of patients regarding end of life decisions	C, E, S	1, 3, 4	8.2 12.1
RC_BK_23	Outlines who might benefit from resuscitation attempts and the importance of knowing/accepting when to stop	C, E, S	1, 3, 4	1.2
RC_BK_24	Discusses the importance of respecting the wishes of relatives to be present during a resuscitation attempt	C, E, S	3, 4	1.2
RC_BK_25	Describes the value of debriefing meetings and the importance of active participation	C, S	3, 4	1.2
Skills				
RC_BS_01	Uses an ABCDE approach to diagnose and commence the management of respiratory and cardiac arrest in adults and children	D, S	1	1.2
RC_BS_02	Demonstrates correct interpretation of the signs of respiratory and cardiac arrest	S	1, 2	1.2
RC_BS_03	Maintains a clear airway using basic techniques with or without simple adjuncts: • Head tilt • Chin lift • Jaw thrust • Oro- and nasopharyngeal airways	D, S	1, 2	5.2
RC_BS_04	Demonstrates correct use of advanced airway techniques including: • Supraglottic devices, including but not limited to LMA, Proseal, LMA supreme, iGel • Tracheal intubation	D, S	1, 2	5.2
RC_BS_05	Maintain ventilation using: • Expired air via a pocket mask • Self-inflating bag via facemask, or advanced airway • Mechanical ventilator	D, S	1, 2	5.2
RC_BS_06	Performs external cardiac compression	D, S	1, 2	1.2
RC_BS_07	Monitor cardiac rhythm using defibrillator pads, paddles or ECG lead	D, S	1, 2	1.2
RC_BS_08	Uses a manual or automated defibrillator to safely defibrillate a patient	D, S	1, 2	1.2
RC_BS_09	Turn a patient into the recovery position	D	1, 2	6.1
RC_BS_10	Prepare a patient for transfer to a higher level of care	A, M	1, 2	1.3
RC_BS_11	Maintains accurate records of all resuscitation events	A, M	1, 2	12.3

Core anaesthesia

Once the trainee has completed all the minimum clinical learning outcomes identified in 'The basis of anaesthetic practice' and has obtained the Initial Assessment of Anaesthetic Competence, they will move on to the remainder of Core Level training. This will provide a comprehensive introduction to all aspects of elective and emergency anaesthetic practice. The core anaesthetic units of training applicable to ICM are:

- Airway management
- Critical incidents
- General and emergency surgery
- Non-theatre
- Transfer medicine
- Trauma and stabilisation

It is anticipated that these units of training will not be delivered in dedicated blocks.

3.9 Airway management

Core airway knowledge and skills have also been included within the first six months "Basis of Anaesthetic Practice" section. Those competencies are repeated here in a standalone airway section, designed to reflect the fundamental importance of airway knowledge and skills to the novice Anaesthetist.

Core clinical learning outcomes:

- Able to predict difficulty with an airway at preoperative assessment and obtain appropriate help
- Able to maintain an airway and provide definitive airway management as part of emergency resuscitation
- Demonstrates the safe management of the can't intubate can't ventilate scenario
- Maintains anaesthesia in a spontaneously breathing patient via a facemask for a short surgical procedure (less than 30 minutes).

	Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge				
AM_BK_01	Explains the methods commonly used for assessing the airway to predict difficulty with tracheal intubation [Ref; OA_BK_05]	I, C, E	1, 2	5.2
AM_BK_02	Describes the effect of pre-oxygenation and knows the correct technique for its use [Cross Ref;induction of GA]	I, C, D, E	1, 2	5.2
AM_BK_03	Describes the principles of management of the airway including techniques to keep the airway open and the use of facemasks, oral and nasopharyngeal airways and laryngeal mask airways [Cross Ref; induction of GA]	I, C, D, E	1, 2	5.2
AM_BK_04	Explains the technique of inhalational induction and describes the advantages and disadvantages of the technique. [Cross Ref; induction of GA]	I, C, D, E	1, 2	6.1
AM_BK_05	Knows the factors influencing the choice between agents for inhalational induction of anaesthesia [Cross Ref; induction of GA]	I, C, D, E	1, 2	6.1
AM_BK_06	In respect of tracheal intubation: • Lists its indications • Lists the available types of tracheal tube and identifies their applications • Explains how to choose the correct size and length of tracheal tube • Explains the advantages/disadvantages of different types the laryngoscopes and blades including, but not exclusively, the Macintosh and McCoy • Outlines how to confirm correct placement of a tracheal tube and knows how to identify the complications of intubation including endobronchial and oesophageal intubation • Discusses the methods available to manage difficult intubation and failed intubation • Explains how to identify patients who are at increased risk of regurgitation and pulmonary aspiration and knows the measures that minimise the risk • Understands the airway management in a patient with acute illness who is at risk of gastric reflux • Categorises the signs of pulmonary aspiration and the methods for its emergency management [Cross Ref;induction of GA; emergency surgery]	I, C, D, E	1, 2	5.2

AM_BK_07	In respect of restoring spontaneous respiration and maintaining the airway at the end of surgery: • Explains how to remove the tracheal tube and describes the associated problems and complications • Recalls/describes how to manage laryngospasm at extubation • Recalls/lists the reasons why the patient may not breathe adequately at the end of surgery • Recalls/identifies how to distinguish between the possible causes of apnoea • Lists the possible causes of postoperative cyanosis • Understands how to evaluate neuro-muscular block with the nerve stimulator [Cross Ref; post-operative]	I, C, E	1	5.2
AM_BK_08	With respect to oxygen therapy: • Lists its indications • Knows the techniques for oxygen therapy and the performance characteristics of available devices • Describes the correct prescribing of oxygen • Recalls/explains the causes and management of stridor [Cross Ref; post-operative]	I, C, E	1, 2	5.1
AM_BK_09	Discusses the indications for RSI [Cross Ref; intra-operative]	I, C, D, E	1, 2	6.1
AM_BK_10	Describes the care of the airway in an unconscious patient in the recovery room, including safe positioning [Cross Ref; post-operative]	I, C, D, E	1, 2	5.2
AM_BK_11	Lists advantages and disadvantages of different techniques for airway management during resuscitation, including but not limited to: • Oro and nasopharyngeal airways • Laryngeal Mask type supraglottic airways including but not limited to: LMA, Proseal, LMA supreme, iGel • Tracheal intubation [Cross Ref; management of respiratory and cardiac arrest]	I, C, E, S	1	5.2
AM_BK_12	Compares the methods by which ventilation can be maintained in a patient suffering a respiratory or cardiac arrest, using: • Mouth to mask • Self-inflating bag • Anaesthetic breathing system • Mechanical ventilator [Cross Ref; management of respiratory and cardiac arrest]	I, C, E, S	1	5.2
AM_BK_13	Discusses the different types of laryngoscope blades available in routine practice and the indications for their use	I, C, E	1	5.2
AM_BK_14	Outlines the advantages/disadvantages and reasons for development of new laryngoscopes (e.g. glidescope)	I, C, E	1	11.8
AM_BK_15	Outlines the indications for fibre-optic intubation and how awake intubation may be achieved	I, C, E	1, 2	5.3
AM_BK_16	Describes the management of the 'can't intubate, can't ventilate' scenario	I, C, E	1, 2	5.3
AM_BK_17	Describes the principles of, and indications for, the use of needle cricothyrotomy and manual jet ventilation	I, C, E	1, 2	5.3
Skills				
AM_BS_01	Demonstrates satisfactory proficiency in performing a relevant clinical examination and assessment of the airway and dentition [Cross Ref; intra-operative]	I, D, E	1	5.2
AM_BS_02	Identifies normal appearances and significant abnormalities in radiographs including: • Cervical spine, chest • Head CT and MRI showing clear abnormalities relevant to the airway [Cross Ref; intra-operative]	I, C, E	1	2.6
AM_BS_03	Reliably predicts the level of supervision they will require [Cross Ref; intra-operative]	I, C, E	1	5.2

AM_BS_04	Demonstrates effective pre-oxygenation, including correct use of the mask, head position and clear explanation to the patient [Cross Ref; induction of GA]	I, D	1, 2, 3	5.2
AM_BS_05	In respect of airway management: • Demonstrates optimal patient position for airway management, including head tilt, chin lift, jaw thrust • Manages airway with mask and oral/nasopharyngeal airways • Demonstrates hand ventilation with bag and mask [including self-inflating bag] • Able to insert and confirm placement of a Laryngeal Mask Airway • Demonstrates correct head positioning, direct laryngoscopy and successful nasal/oral intubation techniques and confirms correct tracheal tube placement • Demonstrates proper use of bougies • Demonstrates correct securing and protection of LMAs/tracheal tubes during movement, positioning and transfer • Correctly conducts RSI sequence • Correctly demonstrates the technique of cricoid pressure [Cross Ref; management of respiratory and cardiac arrest; induction of GA]	I, D	1, 2, 3	5.2
AM_BS_06	Demonstrates correct use of advanced airway techniques including but not limited to Proseal, LMA supreme, iGel [Cross Ref; management of respiratory and cardiac arrest]	D, S	1, 2	5.2 5.3
AM_BS_07	In respect of inhalational induction of anaesthesia: • Satisfactorily communicates with the patient during induction • Satisfactorily conducts induction [Cross Ref; induction of GA]	I, D	1, 2, 3	12.1 6.1
AM_BS_08	Demonstrates the ability to maintain anaesthesia with a face mask in the spontaneously breathing patient [Cross Ref; intra-operative]	I, D	1, 2	5.2
AM_BS_09	Demonstrates failed intubation drill [Cross Ref; induction of GA]	D, S	1, 2	5.3
AM_BS_10	Demonstrates management of 'can't intubate, can't ventilate' scenario [Cross Ref; critical incidents]	D, S	1, 2	5.3
AM_BS_11	Demonstrates correct use of oropharyngeal, laryngeal and tracheal suctioning [Cross Ref; induction of GA]	I, D	1, 2	5.4
AM_BS_12	Demonstrate appropriate management of tracheal extubation, including; • Assessment of return of protective reflexes • Assessment of adequacy of ventilation • Safe practice in the presence of a potentially full stomach [Cross Ref; postoperative]	I, D	1	5.2
AM_BS_13	Demonstrates how to turn a patient into the recovery position [Cross Ref; postoperative]	I, D	1	6.1
AM_BS_14	Demonstrates small and large bore needle cricothyrotomy and manual jet ventilation	D, S	1, 2	5.3
AM_BS_15	Demonstrates surgical cricothyrotomy	D, S	1, 2	5.3

3.10 Critical incidents

Many of the critical incidents listed are found elsewhere in the core level section of the anaesthetic curriculum. Given the importance of the recognition and management of them, they are all included under this one heading for clarity. Whilst trainees may come across the critical incidents listed below during the course of clinical practice, it is anticipated that many will not be encountered in this way and as a result, the use of simulation to assist teaching and assessment is expected.

Core clinical Learning Outcomes:

- To gain knowledge of the principle causes, detection and management of critical incidents that can occur in theatre
- To be able to recognise critical incidents early and manage them with appropriate supervision
- To learn how to follow through a critical incident with reporting, presentation at audit meetings, and discussions with patients
- To recognise the importance of personal non-technical skills and the use of simulation in reducing the potential harm caused by critical incidents

	Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge				
Recall/describes the causes, detection and management of the following:				
CI_BK_01	Cardiac and/or respiratory arrest	I, C, E, S	1	1.2
CI_BK_02	Unexpected fall in SpO_2 with or without cyanosis	I, C, E, S	1	6.1
CI_BK_03	Unexpected increase in peak airway pressure	I, C, E, S	1	4.6
CI_BK_04	Progressive fall in minute volume during spontaneous respiration or IPPV	I, C, E, S	1	4.6
CI_BK_05	Fall in end tidal CO_2	I, C, E, S	1	4.6
CI_BK_06	Rise in end tidal CO_2	I, C, E, S	1	4.6
CI_BK_07	Rise in inspired CO_2	I, C, E, S	1	4.6
CI_BK_08	Unexpected hypotension	I, C, E, S	1	6.1
CI_BK_09	Unexpected hypertension	I, C, E, S	1	6.1
CI_BK_10	Sinus tachycardia	I, C, E, S	1	3.3
CI_BK_11	Arrhythmias: • ST segment changes • Sudden tachyarrythmias • Sudden bradycardia • Ventricular ectopics • Broad complex tachycardia • Ventricular Fibrillation • Atrial fibrillation • Pulseless electrical activity [PEA]	I, C, E, S	1	3.3
CI_BK_12	Convulsions	I, C, E, S	1	3.6
Recalls/describes the causes, detection and management of the following specific conditions:				
CI_BK_13	Difficult/failed mask ventilation	I, C, E, S	1	5.3
CI_BK_14	Failed intubation	I, C, E, S	1	5.3
CI_BK_15	Can't intubate, can't ventilate	I, C, E, S	1	5.3
CI_BK_16	Regurgitation/Aspiration of stomach contents	I, C, E, S	1	4.6
CI_BK_17	Laryngospasm	I, C, E, S	1	5.2
CI_BK_18	Difficulty with IPPV, sudden or progressive loss of minute volume	I, C, E, S	1	4.6
CI_BK_19	Bronchospasm	I, C, E, S	1	4.6
CI_BK_20	Pneumothorax and tension pneumothorax	I, C, E, S	1	4.6
CI_BK_21	Gas / Fat/ Pulmonary embolus	I, C, E, S	1	3.1
CI_BK_22	Adverse drug reactions	I, C, E, S	1	3.1
CI_BK_23	Anaphylaxis	I, C, E, S	1	3.1
CI_BK_24	Transfusion reactions, transfusion of mis-matched blood or blood products	I, C, E, S	1	4.3
CI_BK_25	Inadvertent intra-arterial injection of irritant fluids	I, C, E, S	1	5.8
CI_BK_26	High spinal block	I, C, E, S	1	5.15

CI_BK_27	Local anaesthetic toxicity	I, C, E, S	1	4.1
CI_BK_28	Accidental decannulation of tracheostomy or tracheal tube	I, C, E, S	1	5.3
CI_BK_29	Coning due to increases intracranial pressure	I, C, E, S	1	3.6
CI_BK_30	Malignant hyperpyrexia	I, C, E, S	1	6.1
Discusses the importance of understanding the need for the following attitudes and behaviours:				
CI_BK_31	Awareness of human factors concepts and terminology and the importance of non-technical skills in achieving consistently high performance such as: effective communication, team-working, leadership, decision-making and maintenance of high situation awareness	I, C, E, S	1, 2, 3, 4	12
CI_BK_32	Awareness of the importance and the process of critical incident reporting	I, C, E, S	1, 2, 3, 4	11.4
CI_BK_33	Acceptance that it can happens to you; the unexpected can happen to anyone	I, C, E, S	1, 2, 3, 4	11.3
CI_BK_34	To practice response protocols in resuscitation room or in simulation with other healthcare professionals as appropriate	C, D, S	1, 2, 3, 4	1.2
CI-BK_35	The need to follow through a critical incident with proper reporting, presentation at morbidity meetings and warning flags as necessary, with appropriate supervision	I, C, E, S	1, 2, 3, 4	11.4
CI_BK_36	The provision of information to the patient and where necessary ensuring they get the appropriate counselling and advice, with appropriate supervision	I, C, E, S	1, 2, 3, 4	12.1
Skills				
CI_BS_01	Demonstrates good non-technical skills such as: (effective communication, team-working, leadership, decision-making and maintenance of high situation awareness)	I, C, D, S	1, 2, 3, 4	12
CI_BS_02	Demonstrates the ability to recognise early a deteriorating situation by careful monitoring	I, C, D, S	1, 2, 3, 4	1.1
CI_BS_03	Demonstrates the ability to respond appropriately to each incident listed above	I, C, D, S	1, 2, 3, 4	1.1 12
CI_BS_04	Shows how to initiate management of each incident listed above	I, C, D, S	1, 2, 3, 4	1.1 12
CI_BS_05	Demonstrates ability to recognise when a crisis is occurring	I, C, D, S	1, 2, 3, 4	11.3
CI_BS_06	Demonstrates how to obtain the attention of others and obtain appropriate help when a crisis is occurring	I, C, D, S	1, 2, 3, 4	12.2

3.11 General, urological and gynaecological surgery

This unit includes all aspects of elective and emergency general, urological and gynaecological surgery. It is anticipated that this unit of training will not be delivered as a dedicated block and that the learning outcomes will be gained throughout the entire duration of Core Level training and that these should be achievable in most general hospitals at this level.

Learning outcomes:

- To gain knowledge, skills and experience of the perioperative anaesthetic care of patients requiring elective and emergency general, urological and gynaecological surgery
- To gain understanding of the perioperative management of patients requiring intra-abdominal laparoscopic surgery and the particular issues related to anaesthetic practice, demonstrating the ability to manage such straightforward cases in adults under distant supervision
- To be able to recognise and manage the perioperative complications associated with intra-abdominal surgery that are relevant to anaesthesia

Core clinical learning outcomes:

- Deliver safe perioperative anaesthetic care to uncomplicated ASA 1-3 adult patients requiring elective and emergency surgery such as body surface surgery, appendicectomy and non-complex gynaecological surgery under distant supervision
- Manage a list with uncomplicated ASA 1-3 adults for similar elective surgery under distant supervision

	Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge				
GU_BK_01	Outlines the principles of preoperative assessment of patients undergoing major and minor surgery, including guidelines on the appropriateness of simple tests [i.e. NICE guidelines]	I, C, E	1, 2	2.1 6.1
GU_BK_02	Describes the anaesthetic management of straightforward common surgical procedures and their complications, including but not limited to: • Body surface surgery including breast procedures and thyroid surgery • Urological procedures including TURP and its management [including the TURP syndrome] and procedures on the kidney and urological tract • Laparoscopic surgery including but not exclusively: o Diagnostic laparoscopy o Laparoscopic and open cholecystectomy • Intra-abdominal major general surgery procedures including but not exclusively: o Elective colorectal resection o Elective and emergency surgery for peptic ulcer disease • Endoscopic procedures on the GI and GU tracts including, but not exclusively: o OGD; flexible and rigid o Sigmoidoscopy, Colonoscopy o Cystoscopy • Gynaecology o Elective laparoscopic and open procedures on the uterus o Elective and Emergency procedures in patients in early pregnancy such as ERPC and salpino-oophrectomy for ectopic pregnancy	I, C, E	1, 2, 3, 4	6.1
GU_BK_03	Explains the physical and physiological effects of laparoscopic surgery including the effects of positioning [e.g Trendelenberg / reverse Trendelenberg, specifically in the setting of laparoscopic surgery]	A, C, E	1	6.1
GU_BK_04	Describes the principles of the anaesthetic management of patients with renal failure for non-transplant surgery, including care of shunts	I, C, E	1, 2, 3, 4	6.1
GU_BK_05	Describes the principles of management of non-fasted patients requiring emergency surgery for whatever reason	I, C, E	1, 2	6.1
GU_BK_06	Explains transfusion issues in different surgical procedures	C, E	1, 2	4.3
GU_BK_07	Recalls/describes the management of major haemorrhage	I, C, E	1, 2	4.3 4.4
GU_BK_08	Recalls/explains the relevance of metabolism and nutrition in the perioperative period	I, C, E	1, 2	4.9 6.1
GU_BK_09	Explains the specific problems of anaesthesia for non-obstetric surgery in the pregnant patient	I, C, E	1, 2	3.11 Basic Sciences
GU_BK_10	Recalls the factors associated with regurgitation and airway protection during common surgical procedures	I, C, E	1, 2	5.2
GU_BK_11	Recalls/describes the anaesthetic implications of abnormal body weight, including morbid obesity	I, C, E	1, 2	6.1
GU_BK_12	Describes the NCEPOD classifications and explains the importance of these in delivering surgical care to patients	I, C, E	1, 2	11.7

3.12 Non-theatre

At core level it is anticipated that non-theatre anaesthesia will be confined to the provision of anaesthesia for diagnostic imaging, many critically ill patients are transferred for imaging.

Learning outcomes:

- To safely undertake the intra-hospital transfer of the stable critically ill adult patient for diagnostic imaging
- To understand the risks for the patient of having procedures in these sites
- To understand the responsibilities as a user/prescriber of diagnostic imaging services

Core clinical learning outcome:

- Can maintain anaesthesia for stable critically ill adult patients requiring diagnostic imaging under distant supervision.

	Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge				
DI_BK _01	Explains risks and benefits to patients, and risks to staff from common radiological investigations and procedures, including the use of contrast media	I, C, E	1, 2, 3, 4	2.2
DI_BK_02	Explains current statutory radiological regulations e.g. IRMER 2000 as applied to the referrer, practitioner or operator of diagnostic services	I, C, E	1,2	2.6
DI_BK_03	Explains the general safety precautions and equipment requirements in specific environments e.g. MRI suites	I, C, E	1,2	2.2
DI_BK_04	Recalls/describes the specific anaesthetic implications of imaging techniques including but not limited to: • MRI scanning • CT scanning • Angiography	I, C, E	1, 2, 3, 4	2.2 6.1
DI_BK_05	Recalls/explains the implications of exposing the pregnant or potentially pregnant patient to ionising radiation	I, C, E	1, 2, 3, 4	2.2
Skills				
DI_BS_01	Demonstrates the ability to provide safe anaesthesia for a stable adult patient for diagnostic imaging	I, C, D, M	1, 2, 3, 4	6.1
DI_BS_02	Demonstrates the ability to manage a stable ventilated adult patient for diagnostic imaging	C, M	1, 2, 3, 4	10.1

3.13 Trauma and stabilisation

It is anticipated that this unit of training will not be delivered as a dedicated block; the learning outcomes will be gained throughout Core Level anaesthesia training and that this level should be achievable in most general hospitals.
Resuscitation and stabilisation of trauma patients is a core skill of the intensivist if the trainee is able to take advantages of opportunities whilst attached to anaesthesia that will be of benefit; however it is not a compulsory competence to achieve at this stage.

Learning outcomes:

- To understand the basic principles of how to manage patients presenting with trauma
- To recognise immediate life threatening conditions and prioritise their management

Core clinical learning outcome:

- Understands the principles of prioritizing the care of patients with multi-trauma including airway management

	Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge				
MT_BK_01	Explains the principles of the primary and secondary survey in trauma patients	I, C, E	1, 2, 3	1.5

MT_BK_02	Recalls/describes the related anatomy, physiology and pharmacology [cross reference Basic anatomy, physiology and pharmacology sections]	I, C, E	1	Basic Sciences
MT_BK_03	Recalls/describes the pathophysiological changes occurring in the trauma patient	I, C, E	1	1.5
MT_BK_04	Explains the importance of early recognition of and the potential for airway compromise	I, C, E	1,2	1.5
MT_BK_05	Explains the importance of correct airway management in the trauma patient	I, C, E	1,2	5.3
MT_BK_06	Describes how to recognise and correctly manage hypovolaemia and other causes of shock	I, C, E	1	4.4
MT_BK_07	Recalls/describes the indications for invasive cardiovascular monitoring, the relevant anatomy, principles of placement, associated complications and principles of their management	I, C, E	1, 2	2.7
MT_BK_08	Recalls/discusses the effects of hypothermia, the reasons for its prevention and methods available in trauma patients	I, C, E	1, 2	1.5
MT_BK_09	Explains the importance of correct pain relief in the trauma patient and methods used [from Emergency Dept to post-operatively]	I, C, E	1, 2, 3	7.2
MT_BK_10	Discusses the options available for intravenous access in trauma patients including the intraosseous route	I, C, E	1	9.2
MT_BK_11	Understands the importance of preventing hypothermia and acidosis in the trauma patient	I, C, E	1, 2, 3	1.5
MT_BK_12	Describes the correct initial investigations required in the trauma patient	I, C, E	1	1.5
MT_BK_13	Describes the imaging requirements in the emergency room [Cross Ref; non-theatre]	I, C, E	1, 2	1.5
MT_BK_14	Recalls/explains the principles of assessment and management of patients with brain injury [including the use of the Glasgow Coma Scale [GCS]]	I, C, E	1, 2	1.5
MT_BK_15	Describes the causes and mechanisms for the prevention of secondary brain injury	I, C, E	1	1.5
MT_BK_16	Outlines the particular problems associated with patients presenting with actual or potential cervical spine injuries particularly airway management	I, C, E	1, 2	1.5
MT_BK_17	Describes the principles of the perioperative management of the trauma patient	I, C, E	1, 2, 3, 4	1.5 6.1
MT_BK_18	Describes how to manage intra-hospital transfer of trauma patients [Cross Ref: transfer medicine]	I, C, E	1, 2, 3, 4	10.1
Skills				
MT_BS_01	Demonstrates how to perform the Primary survey in a trauma patient [S]	I, D, S	1, 2	1.5
MT_BS_02	Demonstrates correct emergency airway management in the trauma patient including those with actual or potential cervical spine damage [S]	I, D, S	1, 2	5.2
MT_BS_03	Demonstrates how to manage a tension pneumothorax [Cross Ref: critical incidents] [S]	I, D, S	1	1.5
MT_BS_04	Demonstrates how to insert a chest drain [S]	D, S	1	5.7
MT_BS_05	Demonstrates assessment of patients with brain injury including the use of the GCS [cross ref Neuroanaesthesia] [S]	I, D, S	1, 2	1.5
MT_BS_06	Demonstrates the initial resuscitation of patients with trauma and preparation for further interventions including, emergency surgery	I, D	1, 2, 3, 4	4.4
MT_BS_07	Demonstrates provision of safe perioperative anaesthetic management of ASA 1 and 2 patients with multiple trauma	I, C, D	1, 2, 3, 4	6.1
MT_BS_08	Demonstrates how to perform a secondary survey in a trauma patient	I, D, S	1, 2	1.5
MT_BS_09	Demonstrates the ability to undertake intra-hospital transfer of patients from the Emergency Dept for further management [e.g. to imaging suite, theatre and/or intensive care] [Cross Ref; transfer medicine]	I, D	1, 2, 3, 4	10.1

4. Core Medical Competencies

Knowledge and experience of the management of acutely ill patients outside the critical care is required, including a range of presentations relevant to critical care practice to level 2 as defined in CMT/ACCS. Whilst all these competencies can be acquired in an intensive care unit environment, the volume of cases is such that expertise will be difficult to achieve.

An attachment of no less than 12 months to an acute medical unit admitting a broad range of unselected medical take is required to facilitate the development of diagnostic, investigational and patient management skills.

Advanced Life Support is a Core skill, which must be developed and maintained throughout ICM training.

4.1 Cardio-Respiratory Arrest

The trainee will have full competence in the assessment and resuscitation of the patient who has suffered a cardio-respiratory arrest, as defined by the UK Resuscitation Council

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Demonstrate knowledge of causes of cardio-respiratory arrest	E, T, C, I	1	1.2
Recall the ALS algorithm for adult cardiac arrest	E, T, C, I	1	1.2
Outline indication and safe delivery of drugs used as per ALS algorithm	T, C, I	1	1.2
Skills			
Rapidly assess the collapsed patient in terms of ABC, airway, breathing and circulation	T, C, I	1	1.2
Perform Basic Life Support competently as defined by Resuscitation Council (UK): effective chest compressions, airway manoeuvres, bag and mask ventilation	T, C, I	1	1.2
Competently perform further steps in advanced life support: IV drugs; safe DC shocks when indicated; identification and rectification of reversible causes of cardiac arrest)	T, C, I	1	1.2
Break bad news appropriately (see generic curriculum)	E, T, C, I	3	8.1
Behaviours			
Recognise and intervene in critical illness promptly to prevent cardiac arrest such as peri-arrest arrythmias, hypoxia	T, C, I	1	1.1
Maintain safety of environment for patient and health workers	T, C, I	2	11.3
Hold a valid ALS certificate (MANDATORY REQUIREMENT)	T, C, I	1	1.2
Succinctly present clinical details of situation to senior doctor	T, C, I	3	12.2
Consult senior and seek anaesthetic team support	T, C, I	2	12.7
Recognise importance of sensitively breaking bad news to family	E, T, C, I	3	8.1

4.2 Shocked Patient

The trainee will be able to identify a shocked patient, assess their clinical state, produce a list of appropriate differential diagnoses and initiate immediate management

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Identify physiological perturbations that define shock	E, T, C, I	1	1.1
Identify principle categories of shock (i.e. cardiogenic, anaphylactic)	E, T, C, I	1	1.1
Elucidate main causes of shock in each category (e.g. MI, heart failure, PE, blood loss, sepsis)	E, T, C, I	1	3.1
Demonstrate knowledge of sepsis syndromes	E, T, C, I	1	3.9
Skills			
Recognise significance of major physiological perturbations	E, T, C, I	1	1.1
Perform immediate (physical) assessment (A,B,C)	T, C, I	1	1.1
Institute immediate, simple resuscitation (oxygen, iv access, fluid resuscitation)	T, C, I	1	1.1

Arrange simple monitoring of relevant indices (oximetry, arterial gas analysis) and vital signs (BP, pulse & respiratory rate, temp, urine output)	T, C, I	1	2.7
Order, interpret and act on initial investigations appropriately: ECG, blood cultures, blood count, electrolytes	E, T, C, I	1	2.2
Behaviours			
Exhibit calm and methodical approach to assessing critically ill patient	T, C, I	3	1.1
Adopt leadership role where appropriate	T, C, I	2, 3	12.10
Involve senior and specialist (e.g. critical care outreach) services promptly	T, C, I	2	12.7

4.3 Unconscious Patient

The trainee will be able to promptly assess the unconscious patient to produce a differential diagnosis, establish safe monitoring, investigate appropriately and formulate an initial management plan, including recognising situations in which emergency specialist investigation or referral is required

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Identify the principal causes of unconsciousness (metabolic, neurological)	E, T, C, I	1	3.6
Recognise the principal sub causes (drugs, hypoglycaemia, hypoxia; trauma, infection, vascular, epilepsy, raised intra-cranial pressure, reduced cerebral blood flow, endocrine)	E, T, C, I	1	3.1 3.6 3.10
List appropriate investigations for each	E, T, C, I	1	2.2
Outline immediate management options	E, T, C, I	1	3.1
Skills			
Make a rapid and immediate assessment including examination of coverings of nervous system (head, neck, spine) and Glasgow Coma Score	T, C, I	1	2.1
Initiate appropriate immediate management (A,B,C, cervical collar, administer glucose)	T, C, I	1	1.1
Take simple history from witnesses when patient has stabilised	E, T, C, I	1	2.1
Prioritise, order, interpret and act on simple investigations appropriately	E, T, C, I	1	2.2
Initiate early (critical) management (e.g. control fits, manage poisoning) including requesting safe monitoring	T, C, I	1	3.6
Behaviours			
Recognise need for immediate assessment and resuscitation	E, T, C, I	1	1.1
Assume leadership role where appropriate	T, C, I	2, 3	12.10
Involve appropriate specialists to facilitate immediate assessment and management (e.g. imaging, intensive care, neurosurgeons)	T, C, I	3	12.7

4.4 Anaphylaxis

The trainee will be able to identify patients with anaphylactic shock, assess their clinical state, produce a list of appropriate differential diagnoses, initiate immediate resuscitation and management and organise further investigations

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Identify physiological perturbations causing anaphylactic shock	E, T, C	1	1.1
Recognise clinical manifestations of anaphylactic shock	E, T, C	1	1.1
Elucidate causes of anaphylactic shock	E, T, C	1	1.1
Define follow-up pathways after acute resuscitation	T, C,	1	1.3
Skills			
Recognise clinical consequences of acute anaphylaxis	E, T, C, I	1	1.1
Perform immediate physical assessment (laryngeal oedema, bronchospasm, hypotension)	T, C, I	1	1.1
Institute resuscitation (adrenaline/epinephrine), oxygen, IV access, fluids)	T, C, I	1	1.1
Arrange monitoring of relevant indices	T, C, I	1	2.7
Order, interpret and act on initial investigations (tryptase, C1 esterase inhibitor etc.)	E, T, C, I	1	2.2
Be an ALS provider	T, C, I	1	1.2

Behaviours			
Exhibit a calm and methodical approach	T, C, I	3	12.11
Adopt leadership role where appropriate	T, C, I	2	12.11
Involve senior and specialist allergy services promptly	T, C, I	2, 3	12.7

'The Top 20' – Common Medical Presentations (CMT)

ICM trainees are required to cover the following selected competencies from the CMT 'Top 20':

4.5 Abdominal Pain			
The trainee will be able to assess a patient presenting with abdominal pain to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan			
Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Outline the different classes of abdominal pain and how the history and clinical findings differ between them	E, T, C, I	1	1.1
Identify the possible causes of abdominal pain, depending on site, details of history, acute or chronic	E, T, C, I	1	1.1
Define the situations in which urgent surgical, urological or gynaecological opinion should be sought	E, T, C, I	1	1.1
Determine which first line investigations are required, depending on the likely diagnoses following evaluation	E, T, C, I	1	2.2
Define the indications for specialist investigation: ultrasound, CT, MRI, endoscopy	E, T, C, I	1	2.6
Skills			
Elicit signs of tenderness, guarding, and rebound tenderness and interpret appropriately	E, T, C, I	1	2.1
Order, interpret and act on initial investigations appropriately: blood tests; x-rays; ECG; microbiology investigations	E, T, C, I	1	2.2 2.4 2.6
Initiate first line management: the diligent use of suitable analgesia; 'nil by mouth'; IV fluids; resuscitation	T, C, I	1	1.1
Interpret gross pathology on CT abdo scans, including liver metastases and obstructed ureters with hydronephrosis	E, T, C, I	1	2.6
Behaviours			
Exhibit timely intervention when abdominal pain is the manifestation of critical illness or is life-threatening, in conjunction with senior and appropriate specialists	T, C, I	1	1.1
Recognise the importance of a multi-disciplinary approach including early surgical assessment when appropriate	E, T, C, I	2, 3	12.7
Display sympathy to physical and mental responses to pain	E, T, C, I	3, 4	7.2
Involve other specialties promptly when required	E, T, C, I	2, 3	12.7

4.6 Blackout / Collapse			
The trainee will be able to assess a patient presenting with a collapse to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan (see also 'Syncope' and 'Falls')			
Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Recall the causes for blackout and collapse	E, T, C, I	1	3.6 1.1
Differentiate the causes depending on the situation of blackout +/or collapse, associated symptoms and signs, and eye witness reports	E, T, C, I	1	3.6 1.1
Outline the indications for temporary and permanent pacing systems	E, T, C, I	1	1.1
Define indications for investigations: ECHO, ambulatory ECG monitoring, neuroimaging	E, T, C, I	1	4.5

Skills			
Elucidate history to establish whether event was LOC, fall without LOC, vertigo (with eye witness account if possible)	E, T, C, I	1	2.1
Assess patient in terms of ABC and degree of consciousness and manage appropriately	E, T, C, I	1	1.1 2.1
Perform examination to elicit signs of cardiovascular or neurological disease and to distinguish epileptic disorder from other causes	E, T, C, I	1	2.1
Order, interpret and act on initial investigations appropriately: ECG, blood tests inc. glucose	E, T, C, I	1	2.2
Manage arrhythmias appropriately as per ALS guidelines	E, T, C, I	1	1.1 1.2
Detect orthostatic hypotension	E, T, C, I	1	1.1
Institute external pacing systems when appropriate	T, C, I	1	1.1
Behaviours			
Recognise impact episodes can have on lifestyle particularly in the elderly	E, T, C, I	2, 3	7.1
Recognise recommendations regarding fitness to drive in relation to undiagnosed blackouts	E, T, C, I	2, 3	3.6

4.7 Breathlessness

The trainee will be able to assess a patient presenting with breathlessness to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Recall the common and/or important cardio-respiratory conditions that present with breathlessness	E, T, C, I	1	1.1 3.1
Differentiate orthopnoea and paroxysmal nocturnal dyspnoea	E, T, C, I	1	1.1 3.1
Identify non cardio-respiratory factors that can contribute to or present with breathlessness e.g. acidosis	E, T, C, I	1	4.8
Define basic pathophysiology of breathlessness	E, T, C, I	1	Basic Sciences
List the causes of wheeze and stridor	E, T, C, I	1	1.1
Outline indications for CT chest, CT pulmonary angiography, spirometry	E, T, C, I	1	2.2 2.6
Skills			
Interpret history and clinical signs to list appropriate differential diagnoses:	E, T, C, I	1	2.8
Differentiate between stridor and wheeze	E, T, C, I	1	1.1
Order, interpret and act on initial investigations appropriately: routine blood tests, oxygen saturation, arterial blood gases, chest x-rays, ECG, Peak flow test, spirometry	E, T, C, I	1	2.2
Initiate treatment in relation to diagnosis, including safe oxygen therapy, early antibiotics for pneumonia	E, T, C, I	1	3.1 5.1 4.2
Perform chest aspiration and chest drain insertion	T, C, D, I	1	5.7
Recognise disproportionate dyspnoea and hyperventilation	E, T, C, I	1	1.1
Practice appropriate management of wheeze and stridor	E, T, C, I	1	1.1
Evaluate and advise on good inhaler technique	E, T, C, I	1	7.5
Recognise indications for ventilatory support, including intubation and non-invasive ventilation	E, T, C, I	1	4.7
Behaviours			
Exhibit timely assessment and treatment in the acute phase	T, C, I	1	1. 1
Recognise the distress caused by breathlessness and discuss with patient and carers	E, T, C, I	2, 3	7.1
Recognise the impact of long term illness	E, T, C, I	2	3.2
Consult senior when respiratory distress is evident	E, T, C, I	2, 3	12.7
Involve Critical Care team promptly when indicated	T, C, I	2	12.7

Exhibit non-judgemental attitudes to patients with a smoking history	E, T, C, I	3, 4	12.6

4.8 Chest Pain			
The trainee will be able to assess a patient with chest pain to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan			
Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Characterise the different types of chest pain, and outline other symptoms that may be present	E, T, C, I	1	1.1
List and distinguish between the common causes for each category of chest pain and associated features: cardiorespiratory, , musculoskeletal, upper GI	E, T, C, I	1	1.1
Define the pathophysiology of acute coronary syndrome and pulmonary embolus	E, T, C, I	1	1.1
Identify the indications for PCI and thrombolysis in ACS	E, T, C, I	1	1.1 3.3 4.1
Identify the indications and limitations of cardiac biomarkers and dimer analysis	E, T, C, I	1	2.2
Outline emergency and longer term treatments for PE	E, T, C, I	1	1.1 4.1
Outline the indications for further investigation in chest pain syndromes: CT angiography and tread mill	E, T, C, I	1	2.2
Skills			
Interpret history and clinical signs to list appropriate differential diagnoses: esp. for cardiac pain and pleuritic pain	E, T, C, I	1	2.8
Order, interpret and act on initial investigations in the context of chest pain appropriately: such as ECG, blood gas analysis, blood tests, chest radiograph, cardiac biomarkers	E, T, C, I	1	2.2
Commence initial emergency treatment including coronary syndromes, pulmonary embolus and aortic dissection	E, T, C, I	1	1.1
Elect appropriate arena of care and degree of monitoring	T, C, I	2	1.4 2.7
Formulate initial discharge plan	E, T, C, I	1	7.5
Behaviours			
Perform timely assessment and treatment of patients presenting with chest pain	T, C, I	1	1.1
Involve senior when chest pain heralds critical illness or when cause of chest pain is unclear	E, T, C, I	3	12.7
Recognise the contribution and expertise of specialist cardiology nurses and technicians	E, T, C, I	3	12.7
Recommend appropriate secondary prevention treatments and lifestyle changes on discharge	E, T, C, I	2, 3	7.4
Communicate in a timely and thoughtful way with patients and relatives	E, T, C, I	3	12.1

4.9 Confusion, Acute / Delirium			
The trainee will be able to assess an acutely confused / delirious patient to formulate a valid differential diagnosis, investigate appropriately, formulate and implement a management plan			
Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
List the common and serious causes for acute confusion / delirium	E, T, C, I	1	3.1
Outline important initial investigations, including electrolytes, cultures, full blood count, ECG, blood gases, thyroid function tests	E, T, C, I	1	2.2
Recognise the factors that can exacerbate acute confusion / delirium e.g. change in environment, infection	E, T, C, I	1	7.1
List the pre-existing factors that pre-dispose to acute confusion / delirium	E, T, C, I	1	7.1
Outline indications for further investigation including head CT, lumbar puncture	E, C, I	1	3.6

Skills			
Examine to elicit cause of acute confusion / delirium	T, C, I	1	2.1
Perform mental state examinations (abbreviated mental test and mini-mental test) to assess severity and progress of cognitive impairment	T, C, I	1	2.1
Recognise pre-disposing factors: cognitive impairment, psychiatric disease	E, T, C, I	1	3.2
Understand and act on the results of initial investigations e.g. CT head, LP	E, T, C, I	1	2.6 2.2
Interpret and recognise gross abnormalities of CT head/MRI Brain e.g. Mid line shift and intracerebral haematoma	E, T, C, I	1	2.6 2.2
Behaviours			
Recognise that the cause of acute confusion / delirium is often multi-factorial	E, T, C, I	2, 3	7.1
Contribute to multi-disciplinary team management	T, C, I	3, 4	12.7
Recognise effects of acutely confused / delirious patient on other patients and staff in the ward environment	T, C, I	2, 3	11.3

4.10 Fever

The trainee will be able to assess a patient presenting with fever to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Recall the pathophysiology of developing a fever and relevant use of anti-pyretics	E, T, C, I	1	Basic Sciences 4.1
Recall the underlying causes of fever: infection, malignancy, inflammation (refer SSC)	E, T, C, I	1	3.1
Recall guidelines with regard to antibiotic prophylaxis	E, T, C, I	1	4.2
Differentiate features of viral and bacterial infection	E, T, C, I	1	3.9
Outline indications and contraindications for LP in context of fever	E, T, C, I	1	2.5
Recognition and awareness of management of neutropenic sepsis	E, T, C, I	1	4.1
Skills			
Recognise the presence of septic shock in a patient, commence resuscitation and liaise with senior colleagues promptly	T, C, I	1	3.9
Order, interpret and act on initial investigations appropriately: blood tests, cultures, CXR	T, C, I	1	2.2
Perform a Lumbar puncture and interpret, ensure appropriate investigation of and act on results.	E, T, C, D, I	1	5.15
Arrange appropriate investigation of CSF and interpret results	E, T, C, I	1	2.4
Identify the risk factors in the history that may indicate an infectious disease e.g. travel, sexual history, IV drug use, animal contact, drug therapy	E, T, C, I	1	2.1
Commence empirical antibiotics when an infective source of fever is deemed likely in accordance with local prescribing policy	E, T, C, I	1	4.2
Commence anti-pyretics as indicated	T, C, I	1	4.1
Behaviours			
Adhere to local antibiotic prescribing policies	T, C, I	2	4.2
Highlight importance of nosocomial infection and principles for infection control	E, T, C, I	2	11.2
Consult senior in event of septic syndrome	T, C, I	2, 3	12.7
Discuss with senior colleagues and follow local guidelines in the management of the immunosuppressed e.g. HIV, neutropenia	E, T, C, I	2, 3	3.2
Promote communicable disease prevention: e.g. immunisations, antimalarials, safe sexual practices	E, T, C, I	3, 4	12.4

4.11 Fits / Seizure

The trainee will be able to assess a patient presenting with a fit, stabilise promptly, investigate appropriately, formulate and implement a management plan

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Recall the causes for seizure (refer SSC)	E, T, C, I	1	3.6
Recall the common epileptic syndromes	E, T, C, I	1	3.1 3.6
Recall the essential initial investigations following a 'first fit'	E, T, C, I	1	3.6
Recall the indications for a CT head	E, T, C, I	1	2.7
Describe the indications, contraindications and side effects of the commonly used anti-convulsants	E, T, C, I	1	4.1
Differentiate seizure from other causes of collapse	E, T, C, I	1	3.6
Skills			
Recognise and commence initial management of a patient presenting with status epilepticus	E, T, C, I	1	1.1
Obtain collateral history from witness	E, T, C, I	3	12.2
Promptly recognise and treat precipitating causes: metabolic, infective, malignancy	T, C, I	4	3.1
Differentiate seizure from other causes of collapse using history and examination	E, T, C, I	1	2.1 2.8
Behaviours			
Recognise need for urgent referral in case of uncontrolled recurrent loss of consciousness or seizures	T, C, I	1	12.7
Recognise the principles of safe discharge, after discussion with senior colleague	T, C, I	1, 2, 3	7.5
Recognise importance of Epilepsy Nurse Specialist	T, C, I	1	3.6
Recognise the psychological and social consequences of epilepsy	T, C, I	1	7.1

4.12 Haematemesis & Melaena

The trainee will be able to assess a patient with an upper GI haemorrhage to determine significance; resuscitate appropriately; and liaise with endoscopist effectively

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Specify the causes of upper GI bleeding, with associated risk factors including coagulopathy and use of NSAIDs/Aspirin /anticoagulants	E, T, C, I	1	3.1
Recall scoring systems used to assess the significance and prognosis of an upper GI bleed	E, T, C, I	1	11.7
Recall the principles of choice of IV access including central line insertion, fluid choice and speed of fluid administration	E, T, C, D, I	1	1.1 5.10
Recall common important measures to be carried out after endoscopy, including helicobacter eradication, acid suppression	E, T, C, I	1	4.1
Skills			
Recognise shock or impending shock and resuscitate rapidly and assess need for higher level of care Distinguish upper and lower GI bleeding	E, T, C, I	1	1.1
Demonstrate ability to site large bore IV access	T, C, D, I	1	1.1
Safely prescribe drugs indicated in event of an established upper GI bleed using the current evidence base	E, T, C, I	2	4.1
Behaviours			
Seek senior help and endoscopy or surgical input in event of significant GI bleed	E, T, C, I	3	12.7
Observe safe practices in the prescription of blood products	E, T, C, I	2	4.3

4.13 Palpitations

The trainee will be able to assess a patient presenting with palpitations to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Recall cardiac electrophysiology relevant to ECG interpretation	E, T, C, I	1	Basic Sciences
Recall common causes of palpitations	E, T, C, I	1	1.1
Recall the categories of arrhythmia	E, T, C, I	1	1.1
Recall common arrhythmogenic factors including drugs	E, T, C, I	1	1.1
Recall the indications, contraindications and side effects of the commonly used anti-arrhythmic medications	E, T, C, I	1	4.1
Demonstrate knowledge of the management of Atrial Fibrillation	E, T, C, I	1	1.1
Skills			
Elucidate nature of patient's complaint	E, T, C, I	1	2.1
Order, interpret and act on initial investigations appropriately: ECG, blood tests	E, T, C, I	1	2.2 2.7
Recognise and commence initial treatment of arrhythmias being poorly tolerated by patient (peri-arrest arrhythmias)	E, T, C, I	1	1.1
Ensure appropriate monitoring of patient on ward	T, C, I	2	2.7
Management of newly presented non compromised patients with arrhythmias	T, C, I	1	1.1
Behaviours			
Consult senior colleagues promptly when required	E, T, C, I	3	12.7
Advise on lifestyle measures to prevent palpitations when appropriate	T, C, I	3	3.3

4.14 Poisoning

The trainee will be able to assess promptly a patient presenting with deliberate or accidental poisoning, initiate urgent treatment, ensure appropriate monitoring and recognise the importance of psychiatric assessment in episodes of self harm

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Recall indications for activated charcoal and whole bowel irrigation	E, T, C, I	1	3.10
Recognise importance of accessing TOXBASE and National Poisons Information Service and the use of the information so obtained	T, C, I	1	3.10
Skills			
Recognise critically ill overdose patient and resuscitate as appropriate	E, T, C, I	1	1.1
Take a full history of event, including a collateral history if possible	E, T, C, I	1	2.1
Examine to determine nature and effects of poisoning	T, C, I	1	2.1
Commence poison-specific treatments in accordance with information from TOXBASE/NPIS	T, C, I	2	3.10
Order, interpret and act on initial investigations appropriately: biochemistry, arterial blood gas, glucose, ECG, and drug concentrations	E, T, C, I	1	2.2 2.5
Ensure appropriate monitoring in acute period of care (Toxbase)	T, C, I	1	2.7
Perform mental state examination	T, C, I	1	2.1
Behaviours			
Contact senior promptly in event of critical illness or patient refusing treatment	T, C, I	3	12.7
Recognise the details of poisoning event given by patient may be inaccurate	T, C, I	2	12.1
Show compassion and patience in the assessment and management of those who have self-harmed	E, T, C, I	4	7.1

4.15 Weakness and Paralysis

The trainee will be able to assess a patient presenting with motor weakness to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan (see also 'Speech Disturbance' and 'Abnormal Sensation (Paraesthesia and Numbness)')

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Broadly outline the physiology and neuroanatomy of the components of the motor system	E, T, C, I	1	Basic Sciences
Recall the myotomal distribution of nerve roots, peripheral nerves, and tendon reflexes	E, T, C, I	1	Basic Sciences
Recall the clinical features of upper and lower motor neurone, neuromuscular junction and muscle lesions	E, T, C, I	1	3.6
Recall the common and important causes for lesions at the sites listed above	E, T, C, I	1	3.6
Recall the Bamford classification of stroke, and its role in prognosis	E, T, C, I	1	11.7
Demonstrate knowledge of investigations for acute presentation, including indications for urgent head CT	E, T, C, I	1	3.6
Skills			
Elucidate speed of onset and risk factors for neurological dysfunction	E, T, C, I	1	2.1
Perform full examination to elicit signs of systemic disease and neurological dysfunction and identify associated deficits	E, T, C, I	1	2.1
Describe likely site of lesion in motor system and produce differential diagnosis	E, T, C, I	1	2.8
Order, interpret and act on initial investigations for motor weakness appropriately	E, T, C, I	1	2.2
Recognise when swallowing may be unsafe and manage appropriately	T, C, I	1	2.1
Detect spinal cord compromise and investigate promptly	E, T, C, I	1	1.5
Perform tests on respiratory function and inform senior appropriate	T, T, C, I	1	2.2 12.7
Ensure appropriate care: thrombo-prophylaxis, pressure areas,	E, T, C, I	1	3.6 4.1
Behaviours			
Recognise importance of timely assessment and treatment of patients presenting with acute motor weakness	E, T, C, I	2	3.1
Consult senior and acute stroke service, if available, as appropriate	E, T, C, I	3	12.7
Recognise patient and carers distress when presenting with acute motor weakness	E, T, C, I	2	7.1
Consult senior when rapid progressive motor weakness or impaired consciousness is present	E, T, C, I	3	12.7
Involve speech and language therapists appropriately	E, T, C, I	3	12.7
Contribute to multi-disciplinary approach	E, T, C, I	3, 4	12.7

4.16 Medical Problems / Complications following Surgery

The trainee will be able to assess, investigate and treat medical problems arising post-operatively and during acute illness and recognise importance of preventative measures planning. Trainees in ICM will see post-operative patients who develop organ failures. It is possible to see many more patients who are at risk of developing organ failures and critical illness where interventions may avert ICU admission during a medical attachment.

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Recall the common medical complications occurring in post-operative patients and how they present	E, E, C	1	6.1
Recall the reasons for medical problems frequently presenting atypically post-operatively	E, C	1	6.1
Recall the investigations indicated in different scenarios: shortness of breath, chest pain, respiratory failure, drowsiness, fever, collapse, GI bleed	E, C, I	1	1.1 2.2
Skills			
Recognise the critically ill patient and instigate resuscitative measures	E, T, I	1	1.1

Assess patient with history and examination to form differential diagnosis	E, I	1	2.1 2.8
Initiate treatment when appropriate in consultation with the surgical team	T, C	1	1.1
Institute measures for thrombosis prophylaxis when appropriate.	E, T, C	1	4.1
Encourage preventative measures: thrombo-prophylaxis, physiotherapy, adequate analgesia	E, T, C	1	3.2
Behaviours			
Recognise the importance of thrombo-embolic complications and prophylaxis during acute illness and in post-operative period	E, C	1	3.2 4.1 7.2
Recognise the importance of measures to prevent complications: DVT prophylaxis, effective analgesia, nutrition, physiotherapy, gastric protection	E, C	1	3.2 4.1 7.2
Call for senior help when appropriate	C	3	12.7
Respect opinion of referring surgical team	C	4	12.7

4.17 Medical Problems in Pregnancy

The trainee will be competent in the assessment, investigation and management of the common and serious medical complications of pregnancy. Critically ill obstetric patients either within an ICU or an obstetric High Dependency Unit make up an increasing workload in ICM.

Competence	*Assessment Methods*	*GMP*	*CoBaTrICE*
Knowledge			
Demonstrate awareness of the possibility of pregnancy in women of reproductive years	E, C, I	1	2.1
Outline the normal physiological changes occurring during pregnancy	C, I	1	Basic Sciences
Demonstrate awareness of the impact of long term conditions in relation to maternal and foetal health e.g. diabetes	E, C, I	1	3.2
List the common medical problems occurring in pregnancy	E, C, I	1	3.11
Identify the unique challenges of diagnosing medical problems in pregnancy	E, C, I	1	3.11
Recall safe prescribing practices in pregnancy	E, C, I	1, 2	4.1
Demonstrate awareness of pregnancy related illness, e.g. eclampsia	E, C, I	1	3.11
Skills			
Recognise the critically ill pregnant patient	E, C, I	1	1.1 3.11
Initiate resuscitation measures and liaise promptly with senior colleagues and obstetrician	C, I	1	1.1 3.11
Take a valid history from a pregnant patient	E, C, I	1	2.1
Examine a pregnant patient competently	C, I	1	2.1
Produce a valid list of differential diagnoses	E, C, I	1	2.8
Initiate treatment if appropriate	C, I	1	3.11
Behaviours			
Recognise interrelationships between maternal and foetal health	C, I	2	Basic Sciences 3.11
Communicate with obstetric team throughout the diagnostic and management process	C, I	3	12.7
Discuss case with senior promptly	C, I	3	12.7
Seek timely specialist opinion in cases of new presentations in pregnancy e.g. jaundice, diabetes	C, I	2	12.7
Recognise the importance of thrombo-embolic complication of pregnancy	E, C, I	1	3.11

INTENTIONALLY

BLANK

PAGE