

THE ROYAL COLLEGE OF EMERGENCY MEDICINE

Curriculum and Assessment Systems For Training in Emergency Medicine

**Approved 5th March 2015, effective
from August 2015**

CONTENTS

GLOSSARY OF TERMS	3
1. INTRODUCTION	7
2. RATIONALE	9
2.1 THE PURPOSES OF THIS CURRICULUM.....	9
2.2 DEVELOPMENT	9
2.3 TRAINING PATHWAY.....	10
2.4 ENROLMENT AND COMMUNICATION WITH RCEM.....	14
2.5 DURATION OF TRAINING.....	15
2.6 LESS THAN FULL TIME TRAINING	15
2.7 SUB-SPECIALTY TRAINING	16
2.8 ACTING UP AS A CONSULTANT.....	17
3. CONTENT OF LEARNING	18
3.1 PROGRAMME CONTENT AND OBJECTIVES.....	18
3.2 GOOD MEDICAL PRACTICE - GMP	18
3.3 SYLLABUS	19
3.3.1 <i>Common Competences CT1-ST6</i>	21
3.3.2 <i>ACCS Major Presentations CT1&2</i>	115
3.3.3 <i>ACCS Acute Presentations CT1&2</i>	125
3.3.4 <i>Anaesthetic Competences CT1&2</i>	178
3.3.5 <i>Intensive Care Medicine within ACCS</i>	224
3.3.6 <i>Additional Adult Acute Presentations CT3</i>	245
3.3.7 <i>Paediatric Emergency Medicine</i>	261
3.3.8 <i>HST Major and Acute Presentations (HAPs) ST4-6</i>	297
3.3.9 <i>Procedural Competences CT1&2, CT3-ST6</i>	341
3.3.10 <i>RCEM EMUS Curriculum</i>	345
4. LEARNING AND TEACHING	351
4.1 THE TRAINING PROGRAMME.....	351
4.2 RECOGNITION/TRANSITION ARRANGEMENTS FOR CURRENT TRAINEES.....	351
4.3 TEACHING AND LEARNING METHODS	352
4.4 RESEARCH	354
5. ASSESSMENT	355
5.1 THE ASSESSMENT SYSTEM	355
5.2 ASSESSMENT BLUEPRINT	355
5.3 ASSESSMENT METHODS	357
5.4 ASSESSMENT TOOLS	366
5.5 ARCP DECISION TOOLS	379
5.6 PENULTIMATE YEAR ASSESSMENT	380
5.7 COMPLAINTS AND APPEALS	380
6.WPBA FOR TRAINEE PROGRESSION	381
7. SUPERVISION AND FEEDBACK	383
7.1 SUPERVISION	383
7.2 APPRAISAL.....	385
7.3 EXAMINATION FEEDBACK	385
7.4 EXAMINER TRAINING	386
8. MANAGING CURRICULUM IMPLEMENTATION	387
8.1 INTENDED USE OF THE CURRICULUM BY TRAINERS AND TRAINEES.....	387
8.2 RECORDING PROGRESS IN THE E-PORTFOLIO	388
9. CURRICULUM REVIEW AND UPDATING	389
10. EQUALITY AND DIVERSITY	390

Glossary of terms

Clinical terms

AAA	Abdominal aortic aneurysm
ASD	Atrial septal defect
ALS	Advanced Life Support
APLS	Advanced Paediatric Life Support
ATLS	Advanced Trauma Life Support
BBN	Breaking Bad News
BE	Base excess
BIS	Bispectral index
BLS	Basic Life Support
BMI	Body Mass index
BNF	British National Formulary
BP	Blood pressure
CFAM	Cerebral function analysis monitor
CFM	Cerebral function monitor
CO ₂	Carbon dioxide
COPD	Chronic obstructive pulmonary disease
CPEX	Cardiopulmonary exercise testing
CSF	Cerebrospinal fluid
CSM	Committee on Safety of Medicines
CT	Computed Tomography
CVP	Central venous pressure
DNAR	Do Not Attempt Resuscitation
DVT	Deep vein thrombosis
ECG	Electrocardiogram
ED	Emergency Department
EMG	Electromyogram
EMUS	Emergency Medicine Ultrasound
ENT	Ear, Nose and Throat
ENP	Emergency Nurse Practitioner
EP	Emergency Physician
EPLS	European paediatric life support
ETC	European trauma course
FAST	Focussed Assessment with Sonography in Trauma
GCS	Glasgow Coma Score
GHB	Gamma hydroxy butyrate
GU	Genitourinary
Hb	Haemoglobin
IPPV	Intermittent positive pressure ventilation
IRMER	Ionising Radiation (Medical Exposure) Regulations
LiDCO™	Lithium indicator dilution cardiac output
MAC	Minimum alveolar concentration
MH	Malignant hyperpyrexia
MINAP	Myocardial Ischaemia National Audit Project
MRI	Magnetic resonance imaging
NAI	Non-accidental injury
Ng	Nasogastric
NO	Nitric oxide

NSAID	Non-steroidal anti-inflammatory drug
OT	Occupational Therapy
PALS	Patient Advice and Liaison Service
PAMS	Professions Allied to Medicine
PE	Pulmonary embolus
PGD	Patient Group Directions
PFO	Patent foramen ovale
PPCI	Primary Percutaneous Coronary Intervention
PONV	Post-operative nausea and vomiting
PSI	Pounds per square inch
PT	Physiotherapy
ROSC	Return of spontaneous circulation
RS	Respiratory system
RSI	Rapid sequence induction
SpO ₂	Saturation of haemoglobin with oxygen
SSRI	Selective serotonin receptor inhibitor
STEMI	ST elevation myocardial infarction
SVP	Saturated vapour pressure
TSC	Training Standards Committee
VSD	Ventricular septal defect
WCC	White cell count

Educational and organisational terms

ACCS	Acute Care Common Stem
ACF	Academic Clinical Fellow
ACL	Academic Clinical Lecturer
AIM	Acute Internal Medicine (subspecialty)
AM	Acute Medicine - in context of a setting
AMU	Acute medical unit
ARCP	Annual Review of Competence Progression
ASA	American Society of Anesthesiologists
ATLS	Advanced Trauma Life Support
BTS	British Thoracic Society
CA	Critical appraisal examination
CCT	Certificate of Completion of Training
CDU	Clinical Decision Unit
RCEM	Royal College of Emergency Medicine
CESR CP	Certificate of Eligibility for Specialist Registration through the Combined Programme
CICA	Criminal Injuries Compensation Authority
CRM	Crew resource management
CST	Core Specialty Training
CTR	Clinical Topic Review
DRE-EM	Defined Route of Entry- Emergency Medicine
E&E	Education and Examinations Committee
EM	Emergency Medicine
EmNTS	Emergency Medicine Non Technical Skills
FCEM	Fellowship Examination of the Royal College of Emergency Medicine
GIM	General (Internal) Medicine
GIM(Acute)	That part of GIM associated with the Acute Medical take
GMC	General Medical Council
GMP	Good Medical Practice
HST	Higher Specialty Training
IAC	Initial assessment of competence
IT	Information technology
JRCPTB	Joint Royal Colleges of Physicians Training Board
LEP	Local education provider
MCEM	Membership Examination of the Royal College of Emergency Medicine
NCEPOD	National Confidential Enquiry into Patient Outcome and Death
NICE	National Institute for Health and Clinical Excellence
NPSA	National Patient Safety Agency
OSCE	Objective structured clinical examination
PEM	Paediatric Emergency Medicine
QIP	Quality Improvement Project
Ref	Reference
SASM	Scottish Audit of Surgical Mortality
SAQ	Short Answer Question examination paper
SJT	Situational Judgement Test
TARN	Trauma Audit and Research Network
WBA or WPBA	Workplace based Assessment

Assessment Method Glossary

AA	Audit Assessment
ACAT	Acute Care Assessment Tool
C	Case Based Discussion (CBD)
D	Direct observation of procedural skills (DOPS)
E	Examination
ESLE	Extended supervised learning episode
L	Life support course
Mi or A	Mini-clinical evaluation exercise or anaesthesia clinical evaluation exercise (Mini-CEX or Anaes-CEX)
M	Multi-source feedback (MSF)
PS	Patient Survey
S	Simulation
TO	Teaching Observation
W	Web based, RCEMLearning Hub and Knowledge Bank http://www.rcemlearning.co.uk

GMP domain headings

GMP 1	Knowledge, skills and performance
GMP 2	Safety and quality
GMP 3	Communication, partnership and teamwork
GMP 4	Maintaining trust

1. Introduction

Emergency Medicine (EM) is a rapidly expanding and exciting specialty concerned with the initial diagnosis and management of the acute and urgent aspects of illness and injury affecting patients of all age groups with the full spectrum of undifferentiated physical and behavioural disorders. It is the specialty in which time is critical.

Emergency Physicians are able to look after patients with a wide range of pathologies from the life-threatening to the self-limiting.

- They are experts in identifying the critically ill and injured, providing safe and effective immediate care.
- They are expert in resuscitation and skilled in the practical procedures needed.
- They establish the diagnosis and differential diagnosis rapidly, and initiate or plan for definitive care.
- They work with all the in-patient and supporting specialties as well as primary care and pre-hospital services.
- They are able to correctly identify who needs admission and who can be safely sent home.

EM is practiced in the challenging environment of the Emergency Department. The Emergency Physician is an excellent communicator and team player as well as a leader who is able to get the best out of the people he or she works with.

The Emergency Department (ED) is at the heart of Emergency Medicine and care is delivered in a number of different facilities: the resuscitation room, assessment area, 'majors' area and an area to provide care for the less severely ill and injured. Departments have dedicated facilities and staff for children. EDs also have observation wards/clinical decision units where further care and testing take place under the guidance of the Emergency Physician, in order to determine which patients may be safely discharged and those that need further in-patient care. Emergency Physicians must be able to effectively supervise care delivered in these areas and ensure safe and timely care.

It is intended that the primary training route for Emergency Physicians is to join the Emergency Medicine training programme at year one of the Acute Care Common Stem programme. Doctors may also enter the third year of the programme if they have satisfactorily completed a core training programme in another acute speciality or are judged to have obtained core EM competences whilst working in EM posts. Trainees entering via this route will have an individualised assessment of transferable competences. They will spend up to one additional year gaining undergoing transitional training, to obtain any missing competences prior to entry to higher specialist training, thus ensuring that all future specialists have a standard level of training in Intensive Care Medicine, Acute Medicine and anaesthesia as well as EM.

This curriculum sets out the intended aims and objectives, content, experiences, outcomes and processes of the educational programme intended to provide Emergency Physicians with the knowledge and expertise to be safe, expert and independent practitioners functioning at consultant level within the UK NHS and in the Republic of Ireland.

The changing nature of the practice of Emergency Medicine has also been reflected in the curriculum with increasing emphasis the needs of an ageing population whilst maintaining a focus on the critical care aspects of EM, airway care, and diagnostic testing.

The domains of Good Medical Practice have been mapped to the curriculum, indicating those skills and behaviours that Emergency Physicians need to be effective and to communicate with patients, carers and their families, and how these will be assessed. A particular emphasis is made in the Common competence section on non-technical skills and safety as the work of the emergency physician is unbounded and the EP must remain vigilant and aware at all times.

2. Rationale

2.1 The purposes of this curriculum

The purposes of this curriculum are to define the process of training and the competences needed for:

1. Successful completion of a training programme to achieve the competences for progression to Higher Specialty Training in Emergency Medicine by either completing
 - Core Training in Emergency Medicine (i.e. ACCS generic years one and two, (CT1&2), and a third year, EM CT3)OR
 - Core training in an acute speciality followed by defined route of entry to year 3 of training, including any additional transitional training requiredOR
 - A minimum of two years working in Emergency Medicine (excluding any time spent in the foundation programme, with a minimum of one year in the UK), with demonstrable achievement of ACCS EM competences followed by defined route of entry to year 3 of training, including any additional transitional training required
2. The successful completion of Higher Specialty Training in Emergency Medicine (ST4-ST6) and the award of a CCT in Emergency Medicine.

The length of time for completion of this programme is covered in more detail in section 2.5, Duration of training.

Opportunities for increased expertise in areas directly relevant to Emergency Medicine are covered in section 2.7, subspecialty training:

- Paediatrics
- Pre-hospital Emergency Medicine
- Intensive Care Medicine

2.2 Development

This curriculum was developed by the Curriculum Development groups of the Intercollegiate Training Committee for Acute Care Common Stem (CT1&2) and the Royal College of Emergency Medicine (CT3-ST6). Both groups had broad UK representation and included trainees, laypersons and consultants (including heads of school and programme directors) who are actively involved in teaching and training.

Feedback has been continuously sought from trainers, trainees, laypersons, postgraduate deans and regional committees by the use of interviews and direct communication with the Royal College of Emergency Medicine. In light of this feedback the document was redrafted.

This curriculum replaces the Royal College of Emergency Medicine curriculum dated June 2010 (amended 2012), with changes to ensure that the curriculum meets the GMC's 17 Standards for curricula and assessment. It incorporates revisions to the entry to, content and delivery of the training programme. Two further clinical presentations have been added, and changes made to the non technical skills components of the curriculum. Changes to the assessment system have been made to introduce clearly the dual approach of supervised learning events and assessments of performance.

As the curriculum is followed, a spiral approach to learning is implicit; the trainee will revisit topics and themes seen previously, each time expanding the sophistication of the knowledge, attitudes and decision making. This aids reinforcement of principles, the integration of topics, and the achievement of higher levels of competency, moving from competent to expert.

2.3 Training pathway

Entry into core training for Emergency Medicine is possible following successful completion of a Foundation Programme. Trainees may either enter the training programme

- Into the core programme (ACCS). This would normally be at ST1 but may be at ST2 or 3, subject to having achieved all the required competences.

OR

- via the defined routes of entry (DRE-EM) (subject to meeting the entry criteria)

OR

- at the start of Higher Specialty training (subject to having achieved the necessary competences required for completion of ACCS and CT3/ST3)

ACCS (EM) is a three year core training programme that normally follows Foundation year two. Those trainees considering an academic career should read section 4.4 'ACCS and the academic trainee' contained in this document. Application by trainees will be for ACCS (EM) training but some deaneries may have programmes for generic ACCS training, allowing trainees to specify their choice of speciality prior to the third year of training. Entry into ACCS training is by competitive application.

Acute Care Common Stem

The first two years are spent rotating through the four core specialties - this would typically involve 6/12 each in Anaesthesia, Intensive Care Medicine, Acute Medicine as well as EM.

The purpose of the Acute Care Common Stem programme is to provide trainees with a broad range of knowledge, skills and attitudes to enable them to:-

- Assess any acutely ill patient
- Commence resuscitation
- Diagnose the most likely underlying problem
- Initiate appropriate investigations
- Liaise with the in-patient teams to ensure appropriate definitive care

Uniquely the ACCS programme delivers the structured training and experience needed for this by enabling the trainee to work and learn in the four areas most closely concerned with the acutely ill patient - Acute Medicine, Anaesthesia, Intensive Care Medicine and Emergency Medicine. The knowledge base and skill set of these specialties are closely related. They interface in the care of every acutely ill patient. The ACCS trainee will become familiar with the common acute and life-threatening presentations, their rapid initial assessment and treatment, and how to determine what definitive care will be needed and where it will be provided.

The third year of training (ACCS CT3 EM) focuses on Paediatric Emergencies, and consolidation of the presentations experienced in years one and two.

- Trainees will normally be expected to have completed MCEM Part A before entering the CT3 year and must pass the MCEM Parts B and C prior to progressing to higher specialist training.

These three years of training are designed to ensure the trainee meets the minimum requirements for entry into higher specialty training in EM.

Defined route of entry into EM training (DRE-EM)

This programme may employ accreditation of transferable competences (ATC) so that a doctor who has gained competences should not have to repeat training that they have successfully completed in an approved period of training in another programme. ATC will apply to successfully completed training or gained competences that are contained in this curriculum for CCT. This does not change the requirement that satisfactory completion of training for CCT requires that a doctor has completed all elements of this GMC approved curriculum.

Trainees who have already satisfactorily completed a core training programme in an acute speciality, **or** a minimum of the first two years of a run through training programme in an acute speciality will be eligible to enter the third year of Emergency Medicine training.

In addition, doctors who have a minimum of two years experience in substantive posts in Emergency Medicine (excluding any within a foundation programme or equivalent), at least one of which must be in the UK and both within the previous four years, will be eligible for entry into this programme. The doctor must present evidence of attendance and participation in regular formal education, appraisal and satisfactory competence. Doctors entering via this route may have the EM training period in CT3 (normally one year) reduced to not less than six months should they demonstrate that over half of the CT3 competences have been achieved. Entry following this route will result in a CESR-CP following successful completion of training, including speciality examinations.

Achievement of competences is the key factor to determine progression. Time durations are used to indicate the minimum likely time to achieve the required competences. All of the durations noted above are to be calculated as whole time equivalence, such that for part time workers the actual duration may be longer.

Trainees entering via this defined route will need to demonstrate they have acquired the same competences as those coming through ACCS prior to progression to ST4.

The first component of the transitional training period is to allow the trainee and trainer to be confident that the trainee has the core skills, desire and aptitude to be an Emergency Physician by delivering the first phase of the programme working within the ED.

During this and the subsequent phase of training the main aims are to develop skills to

- Assess any acutely ill patient
- Commence resuscitation
- Diagnose the most likely underlying problem
- Initiate appropriate investigations
- Liaise with the in-patient teams to ensure appropriate definitive care

The training required during this transitional period will depend on the competences achieved during prior training. This training will include:

- One year of Emergency Medicine to achieve competences in general and paediatric Emergency Medicine. This period of training will normally be one year, but may be reduced to not less than 6 months if the trainee has achieved the required EM specific competences during an EM post during core training or other experience (specifically **not** Foundation Training).
- Up to one year to achieve competences in Acute Medicine, Anaesthesia and Intensive Care Medicine. These will be achieved during training posts in these specialties of a minimum of 3 months duration for each specialty

Entry into year 3 by this route will be by competitive application.

Trainees will be required to have completed the EM speciality specific examinations prior to progressing to ST4:

- MCEM Part A or MRCS (the latter for DRE-EM trainees only and must have been passed after 1 January 2012)
- MCEM Parts B and C

These 1-2 years of training are designed to ensure the trainee meets the minimum requirements for continuation into the subsequent phases of higher specialty training in EM. This subsequent period of training is designed to deliver an expert Emergency Physician who is able to supervise and run efficiently a typical ED.

Higher Specialty training (HST) in Emergency Medicine. Entry at this point is by selection through a national recruitment process. A pilot of run through training for core trainees commenced in 2014. HST is designed to deliver an expert Emergency Physician who is able to supervise and run efficiently a typical ED. An evaluation of run through training, with no selection process mid programme, is planned. This pilot will allow trainees to choose to enter EM training via core training or the DRE-EM route and progress, subject to satisfactory progress (including success in the specialty specific examinations), through to the higher specialist training phase without further competitive application (run through training). Trainees will be able to opt for uncoupled training if they wish during this pilot.

Trainees will normally undertake the 6 components of the core training programme by completion of the four ACCS specialities followed by the CT3 year. However there is no fixed requirement to undertake these six components of the first three years of training in any order. Training programmes may arrange the order of posts to meet the needs of trainees and training opportunities, noting the importance of early exposure to Emergency Medicine within the programme.

A diagram of the EM training programme is shown on the next page.

This training will enable the future Emergency Physician to work effectively both individually and as part of a team in the care of the acutely ill and develop a firm foundation for their future practice.

Emergency Medicine Training Programme Flow Chart

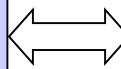
Certificate of Completion of Training in Emergency Medicine or Certificate of Eligibility for Specialist Equivalence Combined Programme



FCEM examination

3 years

**ST4-6 Higher Specialist
Training
in Emergency Medicine**

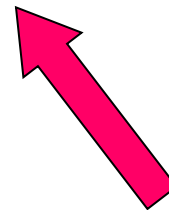
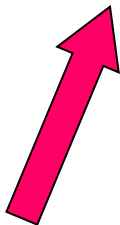


**Sub-specialty training in
Paediatric EM, Pre Hospital EM
or additional training in ICM**

Competitive entry
(Note pilot of run through
training-automatic
progression to HST subject to
satisfactory ARCP in some
training programmes)

MCEM examination

Automatic
progression to HST
subject to
satisfactory ARCP



**ACCS CT3 EM
6/12 Paediatric Emergency Medicine
6/12 Emergency Medicine**

**Transitional training in
AM/ICM/Anaesthesia**

3 Years
Posts
normally
completed
as ACCS
then CT3
but order
can be
changed



**ACUTE CARE COMMON STEM CT1&2
Consists of EM, AM, Anaesthetics & ICM
May be completed in any order
Minimum of 3/12 in each specialty
except for 6 /12 in EM**

**Emergency Medicine with particular focus
on Paediatric EM and general EM
competences not achieved in prior core
training programme**



Competitive entry

ACCS EM- 3 years

Competitive entry

Non Emergency Medicine Core
training programme or EM
experience

Features of this programme

Trainee-led. The e-portfolio is designed to encourage a learner-centred approach with the support of educational supervisors. The e-portfolio contains tools to identify educational needs, enables the setting of learning goals, and facilitates reflective learning and personal development.

Competency based. This curriculum outlines the competences that trainees must achieve and when. The curriculum is also linked to GMP domains, and provides the assessment methods, including examinations.

Supervision. Each trainee has a series of supervisors with clearly defined roles and responsibilities overseeing their training including named clinical supervisors, named educational supervisors and College tutor within training localities and clinicians managing the wider programme including programme director, speciality programme lead and head of school. See section 6.1 for roles and responsibilities.

Appraisal meetings with supervisor. Regular appraisal meetings and review of competence progression are set out within the curriculum and e-portfolio.

Workplace based assessments. Regular workplace based assessments are conducted throughout training (appendix 1- assessment system).

Examinations. The RCEM examinations are mapped to the curriculum and provide summative assessments of communication, leadership, academic, quality improvement, non-technical skills and managerial competences as well as clinical competences.

2.4 Enrolment and Communication with RCEM

Enrolment.

All trainees are required to enrol with the Royal College of Emergency Medicine (RCEM) Training Standards Committee at the start of their training programme. Such enrolment (and payment) is required before trainees can access their e-portfolio.

Communication. The Royal College of Emergency Medicine has a communication strategy for trainees, which is based on electronic communication systems. This includes the RCEM web site (www.rcem.ac.uk) and emails. Trainees are responsible for keeping their contact information up to date. The College takes no responsibility for the results of failed communication with a trainee if the trainee has failed to update the College records. College records of membership details can be updated on line.

All updates, developments and regulations for examinations, training and specialist registration are published on the RCEM website. The website MUST be visited regularly for changes and developments. The website also contains examination advice that provides detailed descriptions of each component of the examination together with example questions and guidance. It also contains details of application processes for examinations including closing dates and any deposit required to secure a place. Details relating to access to RCEMLearning are also found on the college website.

2.5 Duration of training

Although the curriculum is competency based, the duration must be sufficient for the trainee to complete successfully all assessments and must be compliant with EU Directive 2005/36/EC, which requires minimum five year training. Currently the duration of training is six years, comprising of three years ACCS and three years HST. RCEM recognises that some trainees may benefit from a fourth year of HST and that the ARCP process would support this decision by a review of progress.

All trainees must complete the whole training programme before they can be awarded a Certificate of Completion of Training, or must complete the equivalent of the training programme to be awarded a Certificate of Eligibility for Specialist Registration by the combined programme route (CESR CP). To be awarded a CCT all training must be undertaken in GMC prospectively approved training posts.

It would be unusual for a trainee to spend less than 36 months training in an Emergency Department in higher training. Consequently, most trainees who take an out of programme experience will need to extend their training. The only exception may be Out of Programme (training) in Emergency Medicine in a setting where EM competences can be achieved at the same rate as in a UK training setting. Such training must be prospectively approved by the GMC. **It is anticipated that all trainees will complete a minimum of 36 months HST in an ED setting.**

2.6 Less than full time training

Trainees who are unable to work full time are entitled to apply to train less than full time. EC Directive 2005/36/EC requires that:

1. Part-time training shall meet the same requirements as full time training
2. The competent authorities shall ensure that the total duration and quality of part time training is not less than that of full time specialists

The above provisions must be adhered to. LTFT trainees should normally undertake a pro-rata share of the out of hours duties (including on call and other out of hours commitments) required of their full time colleagues in the same programme and at an equivalent stage. This would normally include working nights and weekends to reflect the different case-mix and presentations seen at these times, unless alternative arrangements can be put in place to achieve training and experience in these areas.

Two flexible trainees sharing one post is a recognised way to provide appropriate experience and training.

2.7 Sub-Specialty training

Sub-specialty training in Paediatric Emergency Medicine (PEM)

Paediatric Emergency Medicine is a recognised sub-specialty of Emergency Medicine. Successful completion of a sub-specialty training programme can be recorded with the main specialty on the GMC Specialist Register. The training consists of six months in a Paediatric Emergency Medicine department approved for sub-specialty training and six months of ward-based paediatrics, three months of which should be in the care of unconscious and critically ill children, such as in a Paediatric ICU. Not all programmes will be able to offer, and not all trainees will be able to pursue, sub-specialty training. Appointment will be on a competitive basis. Trainees must hold a training number and be in HST (ideally the final year) before they can be appointed to a sub-specialty training post. Trainees appointed to sub-specialty training posts should inform the College so that their CCT/CESR-CP date can be reviewed.

Doctors who already have EM Specialist Registration may also be eligible to apply for sub-specialty Paediatric Emergency Medicine accreditation, if they have completed sub-specialty training approved by GMC. This sub-specialty would be included against their name on the Specialist Register. For details on this post-CCT process, please see

www.gmc-uk.org/doctors/aboutsubspecialtyrecognition.asp

Subspecialty training in Prehospital Emergency Medicine

Prehospital emergency medicine (PHEM) is a recognised subspecialty of Emergency Medicine. Training in this area is governed by the intercollegiate Board for Training in Pre Hospital Emergency Medicine. EM trainees who successfully complete a recognised one year training programme in PHEM may have this training recorded with their main specialty on the GMC Specialist Register. Entry into PHEM training is by competitive entry, and may be integrated into EM training over a two year period, or be stand alone, over one year.

Entry to PHEM training is by competitive application. Not all programmes will be able to offer, and not all trainees will be able to pursue, sub-specialty training. Trainees must hold a training number and be in HST before they can be appointed to a sub-specialty training post. Trainees appointed to sub-specialty training posts should inform the College so that their CCT/CESR-CP date can be reviewed.

Doctors who already have EM Specialist Registration are also eligible to apply for sub-specialty PHEM training. This sub-specialty would be included against their name on the Specialist Register. Details on this post-CCT process may be found at

www.gmc-uk.org/doctors/aboutsubspecialtyrecognition.asp

Further details of this training may be found at www.ibtphem.org.uk

Dual CCT with Intensive Care Medicine

Training in ICM is governed by the 2011 ICM Curriculum and administered by the Faculty of Intensive Care Medicine.

Training in ICM is in three stages from an entry point at ST3. Before starting this trainees need to have completed their Foundation training and a core training programme (ACCS, Core Medical Training, Core Anaesthetic Training) and to have passed a "primary" exam (MCEM (Full), MRCP UK (Full) or FRCA (Primary)). Entrance to ST3 is via competitive national interviews.

Stage 1 consists of ST3-4. This will include a year of ICM.

Stage 2 consists of years ST5-6. This includes training in cardiothoracic, neuroscience and paediatric ICM as well as further general ICM. It also includes a "special skills" year to allow trainees to develop additional competences to those in the standard syllabus. Trainees need to pass the Final FFICM exam in order to progress to the final year.

Stage 3 is the final year of training (ST7) and is spent entirely in ICM.

Emergency Medicine trainees who have already been accepted for HST may apply to train in ICM as well as EM to obtain a Dual CCT. This replaces the old Joint CCT training (final recruitment was in July 2013). It will usually extend the training programme to 8.5 years, with the special skills year being spent in Emergency Medicine rather than one of the modules developed by the FICMTAC.

Further details can be obtained at <http://www.ficm.ac.uk/training-icm>

2.8 Acting up as a consultant

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

Although acting up often fulfils a genuine service requirement, it is not the same as being a locum consultant. Doctors in training acting up will be carrying out a consultant's tasks but with the understanding that they will have a named supervisor at the hosting hospital and that the designated supervisor will always be available for support, including out of hours or during on-call work. Doctors in training will need to follow the rules laid down by the Deanery /LETB within which they work and also follow the Royal College of Emergency Medicine rules which can be found on the RCEM website [here](#).

3. Content of learning

This curriculum lists the specific knowledge, skills and behaviours to be attained at each stage of training. These are presented in four parts:

1. **Common competences.** This describes the generic competences that should be achieved within the programme. As the trainee progresses the later sections have greater emphasis on leadership skills, and managerial expertise, becoming more contextualised and specialty specific, preparing the EP to lead a United Kingdom NHS or Republic of Ireland ED.

2. **Symptom competences.** These define the knowledge, skills and behaviours required for each of the major presentations and acute presentations that will be encountered by Emergency Physicians, by year of training and by adult/paediatric.

These presentations have been based on Emergency Department audits of activity. The investigation competences are listed alongside these presentations, gaining in complexity as the training progresses. Ultrasound is a skill that starts to be acquired in ST4.

3. **Procedural competences are listed.** The procedural competences which should be acquired by the end of CT2, CT3, and HST are described.

4. **The basic sciences that underpin EM are described;** anatomy, physiology, pharmacology, microbiology and pathology. These have been derived using the Delphi methodology and a large panel of Emergency Physicians, including many recent trainees have been consulted. This is available in appendix 6 – Basic Science Curriculum.

3.1 Programme content and objectives

This programme defines the competences, which the trainee will need in order to act as a consultant in Emergency Medicine.

3.2 Good Medical Practice - GMP

In preparation for the introduction of licensing and revalidation, the GMC has translated *Good Medical Practice* into a framework for appraisal and assessment. This provides a foundation for the development of the appraisal and assessment system for revalidation. The framework can be accessed at

http://www.gmc-uk.org/doctors/licensing/revalidation_gmp_framework.asp

The GMC framework for appraisal and assessment covers the following domains:

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

The GMP column in the curriculum defines which of the four domains are addressed by each competency. There is clearly much overlap, and this is reflected in the assessment of these areas, which often assess more than one domain.

3.3 Syllabus

All competences should be addressed and recorded in the portfolio with evidence of reflection, achievement by case review or formal learning, or in some cases by assessment. Assessment methods are suggested where relevant but it is expected that the trainee and trainer will discuss how to demonstrate completion of the curriculum. Assessment methods that best utilise trainer and trainee should be prioritised.

Core Specialty training CT1-3

ACCS CT1&2

The curriculum is designed to reflect real practice. The focus of the first two years is on presentations to the resuscitation room and on the key complaints of patients who present acutely across a variety of settings. These settings include the Emergency Department, Intensive Care Unit, the Acute Medical Ward and those areas where anaesthetics are given. The EM trainee should ensure they are competent in BLS and ALS, and should complete an ATLS or equivalent course by the end of the second year of training. It is also recommended that the trainee achieves level two safeguarding children during EM CT1 training.

The management of the airway is a key skill of the EP and the period of training in anaesthesia will give the grounding needed to look after the airway safely and effectively throughout the EP's training and subsequent practice. The knowledge, skills and behaviours needed to manage the airway of patients presenting to the Emergency Department will develop throughout the whole programme enabling the EP to be an integral member of the airway team.

The basic sciences that underpin EM are described in detail in appendix 6, and are primarily assessed by the MCEM Part A exam. The basic sciences that underpin practice are also assessed in MCEM Part B and FCEM.

ACCS CT3 EM

This has two aims:

1. To consolidate the trainee's EM practice by increasing experience of the common presentations. During this time trainees will become more expert in their diagnosis and management competences. They will develop an increasing realisation of the range of presentations and the impact of co-morbidities. They will appreciate atypical presentations especially in the elderly and immunocompromised and recognise apparent benign presentations that indicate potential serious pathology. Trainees will be able to look after sicker patients with increasing confidence, using investigations more selectively with more accurate interpretation. Trainees will develop more detailed differential diagnoses focusing on the worst as well as the most probable. Trainees will supervise others, being supportive but also able to detect when greater input is needed for the safe care of the patient, and will develop a greater understanding of human factors and the non-technical skills needed for work in

the ED. They will develop the leadership and supervisory skills to enable them to take on these roles in the next phase of training.

2. The trainee will focus on the common paediatric presentations to the ED and these are laid out in the same way as for adults, with additional areas that are unique to children. The trainee must have successfully completed an APLS course or equivalent during this third year (the earlier the better).

By the end of the third year the trainee will have completed all the assessments (including MCEM Parts B and C) and be ready to work unsupervised (but with access to senior advice at all times) and to supervise others, ensuring safe, effective and timely care.

Transition arrangements for Defined route of entry EM trainees

Trainees entering from an alternative core training programme will have successfully achieved many competences, some of which are directly transferable to EM. During the period of transition, to be ready for progression to ST4, the DRE-EM route trainee will need to achieve all of the required competences for ST4 entry. In addition to a period of one year spent within EM (which may be reduced by up to six months if a period of approved training within EM during core training has been undertaken and the requisite competences achieved- specifically NOT during Foundation training), the trainee will undertake up to one year achieving competences in acute medicine, ICM and anaesthesia. This one year period will comprise training periods of 3-6 months in each of these three elements. This period may be reduced if the trainee has achieved the required competences during a period of training in one or more of these three components during their prior training

HST ST4-6

Having successfully been selected for HST, the next three years are used to:

1. Increase EP expertise in managing all the presentations previously covered (both adult and children);
2. Develop additional areas of knowledge, skills and behaviours as indicated;
3. Increase understanding of human factors in patient safety
4. Increase understanding of management and leadership issues;
5. Increase understanding of pre-hospital care, major incidents and research as it relates to EM.

By the end of this training the trainee will be ready to act as a consultant in Emergency Medicine, able to work unsupervised and lead, manage and supervise others, ensuring the safe running of an ED.

3.3.1 Common Competences CT1-ST6

Generic competences for Emergency Medicine - core to higher and continuing practice level

The generic competences relate to direct clinical practise; the importance of placing patient needs at the centre of care and of promotion of patient safety, team working, and high quality infection control. The curriculum includes the non-technical skills required by Emergency Physicians to ensure safe clinical care. These skills are under the sub-heading of EmNTS (Emergency Medicine non-technical skills).

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

Assessment of acquisition of the common competences

Assessment of the common competences may be integrated into assessments of clinical presentations. However, evidence of acquisition of these competences is most usefully demonstrated by reflection and case descriptions.

At the end of the first three years of EM training (CT1-3) trainees are expected to demonstrate competence at least to level two descriptors in the EM context prior to progression into specialty training. Further assessment will be undertaken as outlined by the various workplace based assessments listed. For higher trainees and consultants in EM, competence to level four is expected in most of the common competences.

Emergency Medicine context

This section of the curriculum also gives specific examples or contexts for the competences in the Emergency Department at different levels from CT1 to consultant. The first three common competences cover the simple principles of history taking, clinical examination and therapeutics and prescribing. These are competences with which the specialist trainee should be well acquainted from Foundation training. It is vital that these competences are practised to a high level by all specialty trainees who should be able to achieve all competences to the highest descriptor level early in their specialty training career.

Safety

A large part of the contribution of the EP is to enhance patient safety and this relies on non technical skills and safety awareness. Throughout the common competences – behaviours related to safety are highlighted by italics

Leadership

The EP is a clinical leader, both within a resuscitation team, as a lead within the shift on the shop floor, and as a professional leader for the department. In each common competence there is a description of the leadership competences expected to be demonstrated in the transition from core trainee to consultant and trainees would be expected to have evidence of leadership in at least the domains of managing the service and improving the service with some evidence of setting direction.

Common Competences

CC1 History taking.....	23
CC2 Clinical examination.....	26
CC3 Therapeutics and safe prescribing.....	29
CC4 Time and workload management.....	33
CC5 Decision making and clinical reasoning.....	37
CC6 The patient as central focus of care.....	42
CC7 Prioritisation of patient safety in clinical practice.....	45
CC8 Team working and patient safety.....	49
CC9 Principles of quality and safety improvement.....	53
CC10 Infection control.....	56
CC11 Managing long term conditions and promoting patient self-care.....	60
CC12 Relationships with patients and communication within a consultation.....	64
CC13 Breaking bad news.....	67
CC14 Complaints and medical error.....	71
CC15 Communication with colleagues and cooperation.....	74
CC16 Health promotion and public health.....	77
CC17 Principles of medical ethics and confidentiality.....	80
CC18 Valid consent.....	84
CC19 Legal framework for practice.....	87
CC20 Ethical research.....	91
CC21 Evidence and guidelines.....	94
CC22 Audit.....	97
CC23 Teaching and training.....	100
CC24 Personal behaviour.....	105
CC25 Management and NHS structure.....	109

CC1 History taking

To progressively develop the ability to obtain a relevant focused 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		
Knowledge	Assessment Methods	GMP Domains
Recognise the importance of different elements of history	E, Mi	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	Mi	1
<i>Recognise that patients do not present history in structured fashion,</i>	E, Mi, ACAT	1, 2, 3
<i>Know likely causes and risk factors for conditions relevant to mode of presentation</i>	E, Mi, C, ACAT	1,2
Recognise that history should inform examination, investigation and management	E, Mi, C, ACAT	1
Skills		
<i>Identify and overcome possible barriers to effective communication, seeks appropriate translators for patients for whom English is not a first language</i>	Mi, C, ACAT	1,2, 3
Manage time and draw consultation to a close appropriately	Mi, C, ACAT	1, 3
Supplement history with standardised instruments or questionnaires when relevant	Mi, C, ACAT	1
Manage alternative and conflicting views from family, carers and friends	Mi, C, ACAT	1, 3
Assimilate history from the available information from patient and other sources	Mi, C, ACAT	1, 3
<i>Recognise and interpret the use of non-verbal communication from patients and carers, recognise the importance of listening to the response to questions</i>	Mi, C, ACAT	1,2, 3
Focus on relevant aspects of history	Mi, C, ACAT	1, 3

Behaviours		
<i>Show respect and behave in accordance with Good Medical Practice, allows time for patient to consider answer</i>	Mi, C, ACAT	2,3, 4
Level Descriptor		
1	<p>Obtains, records and presents accurate clinical history relevant to the clinical presentation</p> <p>Elicits most important positive and negative indicators of diagnosis</p> <p>Starts to ignore irrelevant information</p>	
2	<p>Demonstrates ability to obtain relevant focused clinical history in the context of limited time e.g. outpatients, ward referral</p> <p>Demonstrates ability to target history to discriminate between likely clinical diagnoses</p> <p>Records patient relevant information in most informative fashion</p>	
3	<p>Demonstrates ability to rapidly obtain relevant history in context of severely ill patients</p> <p>Demonstrates ability to obtain history in difficult circumstances e.g. from angry or distressed patient / relatives</p> <p>Demonstrates ability to keep interview focused on most important clinical issues</p>	
4	<p>Able to quickly focus questioning to establish working diagnosis and relate to relevant examination, investigation and management plan in most acute and common chronic conditions in almost any environment</p>	
Emergency department context		
1	<p><i>Obtains history (including children and the elderly) in all common emergencies</i></p> <p><i>Identifies when to focus history to immediate life-threatening symptoms</i></p> <p><i>Starts to focus history to relevant items for emergency management</i></p> <p><i>documents important negatives and positives</i></p>	
2	<p><i>Demonstrates focused history taking in all emergency situations</i></p> <p><i>Recognises common symptom patterns and red flag symptoms in all emergency situations, defines and recognises red flags in history</i></p>	
3	<p>Develops the skill of incremental history taking over the period of a resuscitation</p> <p>Able to take a history and complete immediate resuscitation</p> <p>Further defines skills of information gathering in the following circumstances:</p>	

	Mechanism of injury in major trauma, multiple re-attendances, multiple patients with serious injuries, <i>Avoids bias in multiple re-attenders</i>
4	Able to take competent history in children of all ages, through an interpreter or through third parties (e.g. GP, ambulance service) Supports the development and refinement of history skills in trainees and other healthcare practitioners
Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Is prepared to return for further clarification in the light of unexpected variance or lack of clinical progress
Working with others	Promotes effective history taking as a means of diagnosis in the emergency department Provides role modelling for history taking within the ED Participates in notes review with colleagues to reflect on history taking skills ****,
Managing the service	Adapts history taking style in response to surges in activity or acuity of patients
Improving services	Uses board rounds and other situational learning opportunities to encourage reflection on information gathered and relevance to clinical care **
Setting direction	Uses notes review to improve patient care, uses notes review to develop departmental proforma to maximise information ****

CC2 Clinical examination

<p>To progressively develop the ability to perform focused and accurate clinical examination in increasingly complex patients and challenging circumstances</p> <p>To relate physical findings to history in order to establish diagnosis and formulate a management plan</p>		
Knowledge	Assessment Methods	GMP Domains
Understand the need for a valid clinical examination	E, Mi, C, ACAT	1
Understand the basis for clinical signs and the relevance of positive and negative physical signs	E, Mi, C, ACAT	1
<i>Recognise constraints to performing physical examination and strategies that may be used to overcome them</i>	E, Mi, C, ACAT	1,2
<i>Recognise the limitations of physical examination and the need for adjunctive forms of assessment to confirm diagnosis</i>	E, Mi, C, ACAT	1,2
Skills		
Perform an examination relevant to the presentation and risk factors that is valid, targeted and time-efficient	E, Mi, C, ACAT	1
<i>Recognise the possibility of deliberate harm in vulnerable patients and report to appropriate agencies</i>	E, Mi, C, ACAT	1, 2
Interpret findings from the history, physical examination and mental state examination, appreciating the importance of clinical, psychological, religious, social and cultural factors	Mi, C	1
Actively elicit important clinical findings	E, Mi, C, ACAT	1
Perform relevant adjunctive examinations	E, Mi, C, ACAT	1
Behaviours		
Show respect and behaves in accordance with Good Medical Practice	Mi, C, PS	1, 4

Level Descriptor	
1	<p>Performs, accurately records and describes findings from basic physical examination</p> <p>Elicits most important physical signs</p> <p>Uses and interprets findings adjuncts to basic examination e.g. internal examination, blood pressure measurement, pulse oximetry, peak flow</p>
2	<p>Performs focused clinical examination directed to presenting complaint e.g. cardio-respiratory, abdominal pain</p> <p>Actively seeks and elicits relevant positive and negative signs</p> <p>Uses and interprets findings from adjuncts to basic examination e.g. electrocardiography, spirometry, ankle brachial pressure index</p>
3	<p>Performs and interprets relevance advanced focused clinical examination e.g. assessment of less common joints, neurological examination</p> <p>Elicits subtle findings</p> <p>Uses and interprets findings of advanced adjuncts to basic examination e.g. sigmoidoscopy, FAST ultrasound, echocardiography</p>
4	<p>Rapidly and accurately performs and interprets focused clinical examination in challenging circumstances e.g. acute medical or surgical emergency</p>
Emergency department context	
1	<p>Able to effectively examine patients in all non-critical situations</p>
2	<p>Adapts examination technique to the clinical situation</p> <p>Recognise common examination findings that confirm the diagnosis in common emergency situations</p>
3	<p>Able to examine patients whilst undertaking resuscitation</p>
4	<p><i>Able to examine children of all ages, and to conduct examination of patients with language or other communication difficulties</i></p> <p>Support the development and refinement of examination skills in trainees and other healthcare practitioners</p>

Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Conducts examination sympathetically, respecting the privacy and culture of others
Working with others	Provides role modelling for complete examination within the ED Participates in notes review with colleagues to reflect on examination skills
Managing the service	Adapts examination style in response to surges in activity or acuity of patients
Improving services	Conducts Mini-CEX and provides feedback to enhance the skills of others
Setting direction	<i>Ensures adequate equipment to provide adjuncts to clinical examination – including auroscopes, ophthalmoscopes etc</i> Develops processes for ensuring equipment is available and in working condition

CC3 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		
Knowledge	Assessment Methods	GMP Domains
<i>Recall indications, contraindications, side effects, drug interactions and dosage of commonly used drugs</i>	E, Mi, C, ACAT	1,2
<i>Recall range of adverse drug reactions to commonly used drugs, including complementary medicines, uses guidelines such as Toxbase</i>	E, Mi, C, ACAT	1,2
<i>Recall drugs requiring therapeutic drug monitoring and interpret results</i>	E, Mi, C, ACAT	1,2
<i>Outline tools to promote patient safety and prescribing, including IT systems</i>	Mi, C, ACAT	1, 2
<i>Define the effects of age, body size, organ dysfunction and concurrent illness on drug distribution and metabolism relevant to the trainee's practice</i>	E, Mi, C, ACAT	1, 2
<i>Recognise the roles of regulatory agencies involved in drug use, monitoring and licensing (e.g. National Institute for Clinical Excellence (NICE), Committee on Safety of Medicines (CSM), and Healthcare Products Regulatory Agency and hospital formulary committees)</i>	Mi, C, ACAT	1, 2
Skills		
<i>Review the continuing need for long term medications relevant to the trainee's clinical practice</i>	E, Mi, C, ACAT	1, 2
<i>Anticipate and avoid defined drug interactions, including complementary medicines</i>	E, Mi, C, ACAT	1
<i>Advise patients (and carers) about important interactions and adverse drug effects</i>	E, Mi, C, ACAT	1, 2,3
<i>Make appropriate dose adjustments following therapeutic drug monitoring, or physiological change (e.g. deteriorating renal function)</i>	E, Mi, C, ACAT	1
<i>Use IT prescribing tools where available to improve safety</i>	E, Mi, C, ACAT	1, 2

Employ validated methods to improve patient concordance with prescribed medication	E, Mi, C, ACAT	1, 3
Provide comprehensible explanations to the patient, and carers when relevant, for the use of medicines	E, Mi, C, ACAT	1, 3
Behaviours		
<i>Recognise the benefit of minimising number of medications taken by a patient, selects the use of blister packs and daily medication boxes where relevant</i>	Mi, C, ACAT	1,2
Appreciate the role of non-medical prescribers	Mi, C, ACAT	1, 3
Remain open to advice from other health professionals on medication issues	Mi, C, ACAT	1, 3
<i>Recognise the importance of resources when prescribing, including the role of a drug formulary</i>	Mi, C, ACAT	1, 2
Ensure prescribing information is shared promptly and accurately between a patient's health providers, including between primary and secondary care	C, ACAT	1, 3
Remain up to date with therapeutic alerts, and respond appropriately	C, ACAT	1
Level Descriptor		
1	<p>Understands the importance of patient concordance with prescribed medication</p> <p>Outlines the adverse effects of commonly prescribed medicines</p> <p><i>Uses reference works to ensure accurate, precise prescribing</i></p>	
2	<p>Takes advice on the most appropriate medicine in all but the most common situations</p> <p><i>Makes sure an accurate record of prescribed medication is transmitted promptly to relevant others involved in an individuals care</i></p> <p>Knows indications for commonly used drugs that require monitoring to avoid adverse effects</p> <p>Modifies patient's prescriptions to ensure the most appropriate medicines are used for any specific condition</p> <p>Maximises patient compliance by minimising the number of medicines required that is compatible with optimal patient care</p> <p>Maximises patient compliance by providing full explanations of the need for the medicines prescribed</p>	

	<p>Is aware of the precise indications, dosages, adverse effects and modes of administration of the drugs used commonly within their specialty</p> <p>Uses databases and other reference works to ensure knowledge of new therapies and adverse effects is up to date</p> <p><i>Knows how to report adverse effects and takes part in this process</i></p>
3/4	<p><i>Is aware of the regulatory bodies relevant to prescribed medicines both locally and nationally, ensures reporting of inappropriate dispensing and follows up</i></p> <p>Ensures that resources are used in the most effective way for patient benefit</p>

Emergency department context

1	<p>Completes comprehensive and accurate drug history for all patients in the ED</p> <p>Considers drug interactions and side effects as cause or contributing factors in all presentations in the ED</p> <p><i>Follows departmental or hospital guidelines in prescribing in the ED</i></p> <p>Ensures primary care informed of any changes or additions to medications for a given patient</p>
2	<p><i>Reports adverse effects where responsible for acute presentation</i></p> <p>Gives appropriate advice and documents advice given for take home medication</p> <p>Uses Toxbase, and electronic BNF for advice where necessary to inform decisions on drug related presentations</p>
3	<p>Is able to identify medications from overseas and translate to relevant UK equivalent</p> <p>Able to prescribe methadone safely for drug users who are admitted to the hospital</p>

4	<p>Ensures non-proprietary drugs are prescribed where possible</p> <p><i>Takes the opportunity to review poly-pharmacy and discuss with the GP</i></p> <p>Able to prescribe safely for children in the emergency situation</p> <p>Supervises other trainees in prescribing, drawing attention to altered dosages required or consideration of interactions where appropriate</p> <p>Able to prescribe safely for rapid chemical tranquillisation</p>
Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	<p>Avoids judgemental behaviours in prescribing for drug users</p> <p>Empathic to patients in pain regardless of perceived level of stimulus</p>
Working with others	<p>Supports colleagues in prescribing dilemmas and difficulties</p> <p>Supports the development of PGDs where relevant *</p> <p>Undertakes supervision of nurse prescribing students ****</p>
Managing the service	Undertakes audits of drug prescribing against Trust or departmental guidelines ****
Improving services	Reviews stock and makes suggestions for appropriate stock lists and levels *
Setting direction	Introduces new drugs with evidence-based rationale and business plan *

CC4 Time and workload management

To become increasingly able to prioritise and organise clinical and administrative 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		
Knowledge	Assessment Methods	GMP Domains
Understand that organisation is key to time management	C, ACAT, ESLE	1
<i>Understand that some tasks are more urgent or more important than others, prioritises care</i>	E, Mi, C, ACAT, ESLE, S	1,2
<i>Understand the need to prioritise work according to urgency and importance, prioritises resources</i>	E, Mi, C, ACAT, ESLE	12,
Understand that some tasks may have to wait or be delegated to others	C, ACAT, ESLE, S	1
Outline techniques for improving time management	C, ACAT, ESLE	1
<i>Understand the importance of prompt investigation, diagnosis and treatment in disease management as key to reducing morbidity and mortality</i>	E, Mi, C, ACAT, ESLE	1, 2
Skills		
<i>Identify clinical and clerical tasks requiring attention or predicted to arise</i>	Mi, C, ACAT, ESLE, S	1, 2
Estimate the time likely to be required for essential tasks and plan accordingly	Mi, C, ACAT, ESLE S	1
Group together tasks when this will be the most effective way of working	Mi, C, ACAT, ESLE	1
<i>Recognise the most urgent / important tasks and ensure that they are managed expediently</i>	Mi, C, ACAT, ESLE, S	1,2
<i>Regularly review and re-prioritise personal and team workload</i>	Mi, C, ACAT, ESLE	1,2
Organise and manage workload effectively	Mi, C, ACAT, ESLE	1
Behaviours		
Ability to work flexibly and deal with tasks in an effective fashion	ACAT, C, PS, ESLE	3

	<i>Recognise when you or others are falling behind and take steps to rectify the situation</i>	ACAT, C, PS, ESLE	2,3
	<i>Communicate changes in priority to others</i>	ACAT, PS, ESLE, S	1,2
	<i>Remain calm in stressful or high pressure situations and adopt a timely, rational approach</i>	ACAT, PS, ESLE, S	1,2
Level Descriptor			
1	<p>Recognises the need to identify work and compiles a list of tasks</p> <p>Works systematically through tasks with little attempt to prioritise</p> <p>Needs direction to identify most important tasks</p> <p>Sometimes slow to perform important work</p> <p>Does not use other members of the clinical team</p> <p>Finds high workload very stressful</p>		
2	<p>Organises work appropriately but does not always respond to or anticipate when priorities should be changed</p> <p>Starting to recognise which tasks are most urgent</p> <p>Starting to utilise other members of the clinical team but not yet able to organise their work</p> <p>Requires some direction to ensure that all tasks completed in a timely fashion</p>		
3	<p>Recognises the most important tasks and responds appropriately</p> <p>Anticipates when priorities should be changed</p> <p>Starting to lead and direct the clinical team in an effective fashion</p> <p>Supports others who are falling behind</p> <p>Requires minimal organisational supervision</p>		

4	<p>Automatically prioritises and manages workload in the most effective fashion</p> <p>Communicates and delegates rapidly and clearly</p> <p>Automatically responsible for organising the clinical team</p> <p>Calm leadership in stressful situations</p>
Emergency department context	
1	<p><i>Can manage more than one patient at a time in the ED</i></p> <p><i>Able to prioritise sick patients</i></p> <p>Completes required assessments before ARCP</p>
2	<p><i>Ensures all discharge summaries/diagnoses are completed during the shift</i></p> <p>Manages more than 2 majors/assessment patients and 4 minors at any one time</p> <p>Makes disposal decisions within 30 minutes of completion of examination or seeks help to make decision</p> <p>Able to recognise need to commence resuscitation before full history and examination</p> <p>Able to complete additional audit/research at suggested points in year</p>
3	<p>Delegates some tasks or adopts teamwork strategy to complete tasks where appropriate</p> <p>Completes CTR at least three months before closing date</p> <p>Offers to help others where deadlines slipping</p> <p><i>Allocates staff appropriately to deal with surges in demand</i></p>
4	<p><i>Manages whole team to meet demand with minimal delays</i></p> <p><i>Responds to staffing shortages with appropriate actions to minimise risk to patient flow</i></p> <p>Changes pace and approach to patients in queue during periods of maximal demand</p> <p>Adopts more teaching style during periods of low demand</p>

EmNTS	Specialty trainees should develop expertise in the following non-technical skills
Workload management	<p>Manages own and others workload to avoid both over and under activity</p> <p>Prioritises, delegates and asks for assistance appropriately</p> <p>Offers assistance and provides effective supervision when required</p>
Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	<p>Remains calm during resuscitation ***</p> <p>Remains calm during periods of maximal demand **</p> <p><i>Maintains same level of safe assessment and management regardless of demand</i></p>
Working with others	<i>Recognises signs of stress in others and takes action to support including re-allocation of tasks, and delegation **</i>
Managing the service	<p>Maintains an overview of work streams in department **</p> <p><i>Maximises use of other professions to reduce waits in a safe and appropriate way **</i></p>
Improving services	<p>Undertakes review of rotas and patient attendances, matching demand with staffing</p> <p>Reviews decision making by audit of unexpected events, missed diagnoses and delays in patient care, and develops actions plans for improvement *</p>
Setting direction	<p>Develops business case for additional consultant or nursing staff *</p> <p>Promotes consultant-based service</p> <p><i>Is proactive in reviewing high risk patients for trainees **</i></p>

CC5 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		
Knowledge	Assessment Methods	GMP Domains
Define the steps of diagnostic reasoning	Mi, C, ACAT, ESLE,	1
Interpret history and clinical signs	E, Mi, C, ACAT ESLE	1
Conceptualise clinical problem	E, Mi, C, ACAT ESLE	1
Generate hypothesis within context of clinical likelihood	E, Mi, C, ACAT ESLE	1
Test, refine and verify hypotheses	E, Mi, C, ACAT ESLE,	1
Develop problem list and action plan	Mi, C, ACAT ESLE,	1
<i>Recognise how to use expert advice, clinical guidelines and algorithms – utilising support for decision making in stressful environments</i>	E, Mi, C, ACAT ESLE,	1,2
<i>Recognises the need to determine the best value and most effective treatment both for the individual patient and for a patient cohort</i>	E, Mi, C, ACAT ESLE	1, 2
Define the concepts of disease natural history and assessment of risk	E, Mi, C, ACAT ESLE	1
Recall methods and associated problems of quantifying risk e.g. cohort studies	E, Mi, C, ACAT ESLE	1
Outline the concepts and drawbacks of quantitative assessment of risk or benefit e.g. numbers needed to treat	E, Mi, C, ACAT ESLE	1
Describe commonly used statistical methodology	E, Mi, C, ACAT ESLE	1
Know how relative and absolute risks are derived and the meaning of the terms predictive value, sensitivity and specificity in relation to diagnostic tests	E, Mi, C, ESLE ACAT, ESLE	1

Skills		
Interpret clinical features, their reliability and relevance to clinical scenarios including recognition of the breadth of presentation of common disorders	C, ACAT	1
<i>Recognise critical illness and respond with due urgency</i>	C, ACAT S	1,2
Generate plausible hypothesis(es) following patient assessment	C, ACAT	1
Construct a concise and applicable problem list using available information	C, ACAT	1
Construct an appropriate management plan and communicate this effectively to the patient, parents and carers where relevant	C, ACAT	1, 3, 4
Define the relevance of an estimated risk of a future event to an individual patient	C, ACAT	1
Use risk calculators appropriately	C, ACAT	1
Apply quantitative data of risks and benefits of therapeutic intervention to an individual patient	C, ACAT	1
Search and comprehend medical literature to guide reasoning	AA, C	1
Behaviours		
Recognise the difficulties in predicting occurrence of future events	E, C, Mi, ACAT	1
Show willingness to discuss intelligibly with a patient the notion and difficulties of prediction of future events, and benefit/risk balance of therapeutic intervention	E, ACAT, C, Mi	3
Be willing to facilitate patient choice	E, C, Mi, ACAT	3
Show willingness to search for evidence to support clinical decision making	E, C, Mi, ACAT	1, 4
Demonstrate ability to identify one's own biases and inconsistencies in clinical reasoning	E, C, Mi, ACAT	1, 3

Level Descriptor	
1	<p>In a straightforward clinical case:</p> <p>Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence</p> <p>Institutes an appropriate investigative plan</p> <p>Institutes an appropriate therapeutic plan</p> <p>Seeks appropriate support from others</p> <p>Takes account of the patient's wishes</p>
2	<p>In a difficult clinical case:</p> <p>Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence</p> <p>Institutes an appropriate investigative plan</p> <p>Institutes an appropriate therapeutic plan</p> <p>Seeks appropriate support from others</p> <p>Takes account of the patient's wishes</p>
3	<p>In a complex, non-emergency case:</p> <p>Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence</p> <p>Institutes an appropriate investigative plan</p> <p>Institutes an appropriate therapeutic plan</p> <p>Seeks appropriate support from others</p> <p>Takes account of the patient's wishes</p>
4	<p>In a complex, non-emergency case:</p> <p>Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence</p> <p>Institutes an appropriate investigative plan</p> <p>Institutes an appropriate therapeutic plan</p> <p>Seeks appropriate support from others</p> <p>Takes account of the patient's wishes and records them accurately and succinctly</p>

Emergency department context	
1	<p>Records differential and final working diagnosis in all patients</p> <p>Is selective in using investigations in standard cases and records the results in all cases</p> <p>Documents and acts on patient's wishes</p>
2	<p><i>States reason for investigations where used</i></p> <p><i>Recognises unexpected abnormalities and seeks help in interpretation</i></p> <p><i>Selective differential diagnosis offered in most standard cases</i></p> <p><i>Recognises need to access hospital notes in long term conditions</i></p>
3	<p>In complex cases – provides most likely diagnoses and follows explicit rule in/rule out strategy for investigations</p> <p>Selects treatments for most likely diagnoses rather than treating all possibilities</p> <p>Uses common emergency medicine calculators to enhance risk assessment and decision making</p>
4	<p>Adjusts differential diagnosis in the light of results of investigations</p> <p>Offers alternative diagnoses to others during supervision and supports them in rule in / rule out strategy</p> <p><i>Uses full range of decision making strategies (intuitive, analytical, heuristic, causal etc) in response to different presentations</i></p>
EmNTS	Specialty trainees should develop expertise in the following non-technical skills
Option Generation	Uses all resources written and verbal to gather information and generate appropriate options for a given problem or task. This includes other members of the ED team where appropriate
Selecting and Communicating Options	Considers risks of various options and discusses this with the ED team. Involves clearly stating decisions and explaining reasons , if necessary
Outcome Review	Once a decision has been made, reviews suitability in light of new information or change in circumstances and considers new options. Checks that designated tasks have been completed
Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	<i>Avoids pre-assessment bias arising from nurse assessment, or other factors</i>

	Demonstrates awareness of possibility of other bias in diagnostic reasoning
Working with others	Supports other trainees in rational use of investigations and decision making ** Ensures others consider important alternative diagnoses where high risk presentations **
Managing the service	Accepts working diagnosis and acts in patient's best interest <i>Responds to missed diagnoses by appropriate investigation and action plans</i> <i>Ensures action plans from unplanned events are completed *</i>
Improving services	Provides training in decision making for doctors and nurse practitioners *** Ensures decision support tools are available where appropriate *** Enables access to online calculators *
Setting direction	Promotes patient choice and provides information for trainees on legal framework around capacity and choice

CC6 The patient as central focus of care

Prioritises the patient's wishes encompassing their beliefs, concerns expectations and needs		
Knowledge	Assessment Methods	GMP Domains
Recall health needs to deal appropriately with diverse patient groups including those such as learning disabled, elderly, refugees and non-English speaking	E, C, Mi, ACAT	1
Skills		
Give adequate time for patients to express ideas, concerns and expectations	E, C, ACAT	1, 3, 4
Respond to questions honestly and seek advice if unable to answer	E, C, ACAT	3
Encourage the health care team to respect the philosophy of patient-focused care	E, C, ACAT	3
Develop a self-management plan including investigation, treatments and requests/instructions to other healthcare professionals, in partnership with the patient	E, C, ACAT	1,3
Support patients, parents and carers where relevant to comply with management plans	E, C, ACAT, PS	3
Encourage patients to voice their preferences and personal choices about their care	E, C, ACAT, PS	3
Behaviours		
Support patient self-management	Mi, C, ACAT, PS	3
Recognise the duty of the medical professional to act as patient advocate	Mi, C, ACAT, PS	3, 4
Level Descriptor		
1	<p>Responds honestly and promptly to patient's questions but knows when to refer for senior help</p> <p>Recognises the need for different approaches to individual patients</p>	

2	Recognises more complex situations of communication, accommodates disparate needs and develops strategies to cope
3	Deals rapidly with more complex situations, promotes patient's 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
Emergency department context	
1	<p>Provides information for patients on discharge including expected recovery time and impact on ability to work for common conditions e.g. ankle sprain</p> <p>Recognises the impact of the condition on the patient e.g. ability to drive</p> <p>Gives patient copies of the letter to GP</p> <p>Appreciates ethnic or cultural concentrations in local population and attempts to gain knowledge relating to differences which affects clinical management plans</p>
2	<p>Recognises the Gillick-competent adolescent and adjusts care accordingly</p> <p>Is able to make an appropriate assessment of capacity in adults and takes appropriate steps to manage/treat patients who lack capacity, including consulting with relatives/carers where possible.</p> <p>Supports patients returning to work, including use of physiotherapy services, recognising the negative impact of not working</p>
3	<p>Discusses alternative management options with patients who decline conventional treatment</p> <p>Deals with patient's beliefs in sympathetic manner including requests for female doctor</p>
4	<p>Effectively promotes self-care to 'worried well' patients avoiding unnecessary investigations and treatments</p> <p>Accepts patient views and does not try to change – including self-discharge after overdose or life-threatening conditions</p> <p>Recognises that patients may not need to be 100% fit in order to return to work</p>

Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Remains empathic to patients who challenge medical dogma
Working with others	Supports nurses and junior trainees in discharging the 'worried well' ** Acts as patient advocate in end of life decisions or DNAR dilemmas, liaising with Intensive Care Medicine and other specialties to ensure best outcome for individual patients
Managing the service	Accepts and investigates complaints recognising the patient viewpoint * Promotes patient survey and acts on results of survey *
Improving services	Invites patient representative review of departmental processes and pathways Attends or ensures engagement with local patient groups ***
Setting direction	Defines departmental philosophy to place patient at the centre of care and actively promotes

CC7 Prioritisation of patient safety in clinical practice

<p>To understand that patient safety depends on the organisation of care and healthcare staff working well together</p> <p>To never compromise patient safety</p> <p>To understand the risks of treatments and to discuss these honestly and openly with patients so that patients are able to make informed decisions about risks</p> <p>Ensure that all staff are aware of risks and work together to minimise risk</p>		
Knowledge	Assessment Methods	GMP Domains
<i>Outline the features of a safe working environment</i>	Mi, C, ACAT	1,2
<i>Outline the hazards of medical equipment in common use</i>	Mi, C, ACAT	1,2
<i>Recall side effects and contraindications of medications prescribed</i>	E, Mi, C, ACAT	1,2
<i>Recall principles of risk assessment and management</i>	C	1,2
<i>Recall the components of safe working practice in personal, clinical and organisational settings</i>	C, ACAT	1,2
<i>Recall local procedures for optimal practice e.g. GI bleed protocol, safe prescribing</i>	Mi, C, ACAT	1,2
<i>Recall the NHS and regulatory procedures when there is concern about performance of the members of the healthcare team</i>	Mi, C, ACAT	1,2
Skills		
<i>Recognise when a patient is not responding to treatment, reassess the situation, and encourage others to do so</i>	Mi, C, ACAT, S	1,2
<i>Ensure the correct and safe use of medical equipment, ensuring faulty equipment is reported appropriately</i>	Mi, C, ACAT	1,2
<i>Improve patients' and colleagues' understanding of the side effects and contraindications of therapeutic intervention</i>	Mi, C, ACAT	1, 2,3
<i>Sensitively counsel a colleague following a significant event, or near miss incident, to encourage improvement in practice of individual and unit</i>	C, ACAT	2,3
<i>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</i>	Mi, C, ACAT, M, S	1,2

Behaviours			
	<i>Continue to maintain a high level of safety awareness at all times</i>	Mi, C, ACAT	2
	<i>Encourage feedback from all members of the team on safety issues</i>	Mi, C, ACAT, M	2,3
	<i>Show willingness to take action when concerns, including both clinical and non-clinical aspects e.g. bullying, are raised about performance of members of the healthcare team, and act appropriately when these concerns are voiced to you by others</i>	Mi, C, ACAT M	2,3
	<i>Continue to be aware of one's own limitations, and operate within them competently</i>	Mi, C, ACAT	1,2
Level Descriptor			
1	<p>Discusses risks of treatments with patients and is able to help patients make informed decisions about their treatment</p> <p>Does not hurry patients into decisions</p> <p>Promotes patient's safety to more junior colleagues</p> <p>Always ensures the safe use of equipment. Follows guidelines unless there is a clear reason for doing otherwise</p> <p>Acts promptly when a patient's condition deteriorates</p> <p>Recognises untoward or significant events and always reports these</p> <p>Leads discussion of causes of clinical incidents with staff and enables them to reflect on the causes</p> <p>Able to undertake a root cause analysis</p>		
2	<p>Demonstrates ability to lead team discussion on risk assessment and risk management and to work with the team to make organisational changes that will reduce risk and improve safety</p>		
3	<p>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 healthcare system</p>		
4	<p>Shows support for junior colleagues who are involved in untoward events</p> <p>Is fastidious about following safety protocols and encourages junior colleagues to do the same</p>		
Emergency department context			
1	<p>Seeks training in all new equipment in the ED when starting the post</p> <p>Recognises patient deterioration and seeks help</p> <p>Reports serious untoward incidents in the ED</p>		

2	<p>Seeks out local protocols in the department and follows them</p> <p>Identifies and mentions risks from faulty or missing equipment in the ED</p> <p>Identifies and requests action plans for frequent attenders or high risk patients</p>
3	<p>Undertakes a root cause analysis of serious incident</p> <p>Participates actively in risk management including X-ray report review</p> <p>Intervenes when patient is at risk – including being sent home inappropriately</p> <p>Identifies high risk patients including non-English speaking, aggressive or un-cooperative or clinically brittle conditions</p> <p>Organises the team to make maximum use of skills to ensure safe and timely assessment of all patients particularly at periods of high activity</p> <p>Participates in clinical incident reviews</p>
4	<p>Supports trainees and nursing staff after untoward clinical incident and debriefs appropriately</p> <p>Appropriately identifies high risk periods related to surges in activity, acuity or reduced staffing and takes appropriate action including notifying consultant</p> <p>Recognises requirement for appropriate shift handover and promotes sharing of information to plan next shift</p>

EmNTS	Specialty trainees should develop expertise in the following non-technical skills
Gathering information	Surveys the environment to pick up cues that may need action as well as requesting reports from others
Anticipating	Anticipates potential issues such as complications of treatment, staffing or cubicle availability in the department and discusses contingencies
Updating the team	Cross-checks information to ensure it is reliable. Communicates situation to keep team 'In the picture,' rather than just expecting action
Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Appreciates risks associated with individual patient presentations Adjusts behaviour in high risk situations such as infection risk, aggressive patients,**
Working with others	Articulates and explains risk of individual patients or situations explicitly to trainees and nurses in order to ensure all staff take mitigating action e.g. HIV positive, unexpected deterioration ** Encourages reporting of incidents in the ED by staff
Managing the service	Participates in risk management meetings *** Undertakes activities to manage risk including training staff, providing new protocols or reviewing frequent attender records ***
Improving services	Conducts a risk assessment of the department focusing on a particular area such as infection control, equipment, protocols, educational records *
Setting direction	Acknowledges impact of time pressure on safety and promotes equipment for adequate time, including admitting patients for period of observation in a CDU environment Develops observational protocols for high risk patients *

CC8 Team working and patient safety

<p>To develop the ability to work well in a variety of different teams, e.g. the ward team and the infection control team, and to contribute to discussion on the team's role in patient safety</p> <p>To develop the leadership skills necessary to lead teams so that they are more effective and able to deliver better safer care</p>		
Knowledge	Assessment Methods	GMP Domains
Outline the components of effective collaboration	C, ACAT, ESLE	1
Describe the roles and responsibilities of members of the healthcare team	C, ACAT ESLE	1
<i>Outline factors adversely affecting a doctor's performance and methods to rectify these</i>	C,ESLE	1,2
Skills		
Practise with attention to the important steps of providing good continuity of care	Mi, C, ACAT, ESLE	1,3,4
<i>Accurate attributable note-keeping</i>	Mi, C, ACAT ESLE	1, 2,3
Preparation of patient lists with clarification of problems and ongoing care plan	Mi, C, ACAT. M ESLE	1
<i>Detailed handover between shifts and areas of care</i>	Mi, C, ACAT, M ESLE, S	1, 2,3
<i>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</i>	Mi, C, ACAT ESLE S	1, 2, 3
Lead and participate in interdisciplinary team meetings	Mi, C, ACAT	3
<i>Provide appropriate supervision to less experienced colleagues</i>	Mi, C, ACAT, M ESLE	2,3

Behaviours		
<i>Encourage an open environment to foster concerns and issues about the functioning and safety of team working</i>	Mi, C, ACAT, M ESLE, S	2,3
<i>Recognise and respect the request for a second opinion</i>	Mi, C, ACAT, M ESLE	2,3
<i>Recognise the importance of induction for new members of a team</i>	Mi, C, ACAT, M ESLE	2,3
<i>Recognise the importance of prompt and accurate information sharing with the Primary Care team following hospital discharge</i>	Mi, C, ACAT, M ESLE	2,3
Level Descriptor		
1	<p>Works well within the multidisciplinary team and recognises when assistance is required from the relevant team member</p> <p><i>Demonstrates awareness of own contribution to patient safety within a team and is able to outline the roles of other team members</i></p> <p>Keeps records up-to-date, legible and relevant to the safe progress of the patient</p> <p>Hands over care in a precise, timely and effective manner</p>	
2	<p>Demonstrates ability to discuss problems within a team to senior colleagues. Provides an analysis and plan for change</p> <p>Demonstrates ability to work with the virtual team to develop the ability to work well in a variety of different teams, e.g. the ward team and the infection control team, and to contribute to discussion on the team's role in patient safety</p> <p>To develop the leadership skills necessary to lead teams so that they are more effective and able to deliver better, safer care</p>	
3	<p>Leads multidisciplinary team meetings but promotes contribution from all team members</p> <p>Recognises need for optimal team dynamics and promotes conflict resolution</p> <p>Demonstrates ability to convey to patients after a handover of care that although there is a different team, the care is continuous</p>	

4	<p>Leads multi-disciplinary team meetings allowing all voices to be heard and considered. Fosters an atmosphere of collaboration</p> <p>Demonstrates ability to work with the virtual team</p> <p>Ensures that team functioning is maintained at all times</p> <p>Promotes rapid conflict resolution</p>
Emergency department context	
1	<p>Acts as an effective team member of trauma/cardiac arrest teams</p> <p>Maintains legible clinical record</p> <p>Completes the GP discharge letter for all patients during the shift</p> <p>Makes appropriate referrals with relevant information and successfully refers patients</p> <p>Ensures that patient safety is a core feature of team working</p>
2	<p>Acts under supervision as leader of resuscitation team</p> <p>Works with the nurse in charge to ensure patient management plans are clear and documented at all times</p> <p>Works with the reception staff to ensure patient demographics are complete and updated</p>
3	<p>Leads resuscitation team for adults and children</p> <p>Supports in-patient specialty teams including hospital-at-night team</p> <p>Undertakes induction of locum staff during shift</p> <p>Ensures handover and referral of patients on CDU /observation ward</p>
4	<p>Develops team working between ED middle grade staff including non-trainees and part time staff</p> <p>Effectively leads handover of shifts</p> <p>Seeks nurse views and support and able to delegate leadership appropriately</p> <p>Assemble and manage an unrehearsed rapidly formed team to maximise effectiveness</p>

EmNTS	Specialty trainees should develop expertise in the following non-technical skills
Supervision and feedback	Assesses capabilities and identifies knowledge gaps. Provides opportunities teaching and constructive feedback
Team building	Provides motivation and support for the team. Appears friendly and approachable
Quality of Communication	Gives verbal and written information concisely and effectively. Listens, acknowledges receipt of information and clarifies when necessary
Authority and Assertiveness	Behaves in an appropriately forceful manner and speaks up when necessary. Resolves conflict effectively and remains calm when under pressure
Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Leads by example, taking on the 'routine' tasks as well as critical care patients Recognises and demonstrates different leadership styles where required e.g. critical care patient vs. multiple minor patients *** Listens to other professionals e.g. in-patient specialty medical staff and nursing staff
Working with others	Able to supervise others in developing leadership roles (i.e. CT1/2) ** Debriefs the team in supportive manner ensuring learning for all **
Managing the service	Identifies colleagues with performance problems and reports in constructive way to relevant supervisor Seeks out other teams who may impact on the departmental safety and asks for advice e.g. infection control, Intensive Care Medicine outreach, pharmacy, community matrons, discharge team
Improving services	Attends ED senior team meetings and contributes to suggestions for change Undertakes change management project to improve care of particular groups e.g. introducing new protocols *
Setting direction	Makes suggestions for team development at junior doctor, nurse and multidisciplinary level including team exercises

CC9 Principles of quality and safety improvement

To recognise the desirability of monitoring performance, learning from mistakes and adopting no blame culture in order to ensure high standards of care and optimise patient safety		
Knowledge	Assessment Methods	GMP Domains
<i>Understand the elements of clinical governance</i>	C, M	1,2
<i>Recognise that governance safeguards high standards of care and facilitates the development of improved clinical services</i>	C, M	1, 2
<i>Define local and national significant event reporting systems relevant to specialty</i>	Mi, C, ACAT,	1,2
<i>Recognise importance of evidence-based practice in relation to clinical effectiveness</i>	E, C	1,2
<i>Outline local health and safety protocols (fire, manual handling etc)</i>	C	1,2
<i>Understand risk associated with the trainee's specialty work including biohazards and mechanisms to reduce risk</i>	C	1,2
<i>Outline the use of patient early warning systems to detect clinical deterioration where relevant to the trainee's clinical specialty</i>	Mi, C, ACAT,	1,2
<i>Keep abreast of national patient safety initiatives including NPSA, NCEPOD reports, NICE guidelines etc</i>	Mi, C, ACAT,	1,2
Skills		
<i>Adopt strategies to reduce risk e.g. surgical pause safety checklist</i>	ACAT, C	1, 2
<i>Contribute to quality improvement processes – for example;</i> <i>Audit of personal and departmental performance</i> <i>Errors / discrepancy meetings</i> <i>Critical incident reporting</i> <i>Unit morbidity and mortality meetings</i> <i>Local and national databases</i>	AA, C	2
<i>Maintain a folder of information and evidence, drawn from your medical practice</i>	C	2

<i>Reflect regularly on your standards of medical practice in accordance with GMC guidance on licensing and revalidation</i>		AA	1, 2, 3, 4
Behaviours			
<i>Participates in safety improvement strategies such as critical incident reporting</i>		C, M	2,3
<i>Engage with an open no-blame culture</i>		C, M	2,3
<i>Respond positively to outcomes of audit and quality improvement</i>		C, M, PS	1, 3
<i>Co-operate with changes necessary to improve service quality and safety</i>		C, M	1, 2
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 audit		
3	Demonstrates personal and service performance Designs audit protocols and completes audit loop		
4	Leads in review of patient safety issues Implements change to improve service Engages and guides others to embrace governance		

Emergency department context	
1	<p>Completes e-portfolio before ARCP</p> <p>Retains log of patients seen and reflective diary of specific cases with learning outcomes</p> <p>Uses an early warning system systematically to identify sick patients and seeks appropriate help</p>
2	<p>Completes an audit of ED patients</p> <p>Uses RCEM guidelines at work</p> <p>Seeks to complete RCEM Learning modules relevant to post and patients</p>
3	<p>Makes clear recommendations from audit and ensures completion of actions</p> <p>Completes or contributes to a guideline review for a specific ED topic</p>
4	<p>Ensure unexpected events are reported in the ED</p>
Leadership	<p>Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction</p>
Demonstrating personal qualities	<p>Uses portfolio as a learning resource to record progress and reflective practice ***</p>
Working with others	<p>Encourages case based discussions</p> <p>Contributes to clinical governance meetings including presentation of individual patients and management problems ***</p>
Managing the service	<p>Undertakes investigation of untoward clinical incident *</p>
Improving services	<p>Uses RCEM guidelines or national audits to develop new models of working to meet national standards *</p>
Setting direction	<p>Contributes to Trust audit programme ensuring Trust and RCEM priorities reconciled ***</p>

CC10 Infection control

To develop the ability to manage and control infection in patients, including controlling the risk of cross-infection, appropriately managing infection in individual patients, and working appropriately within the wider community to manage the risk posed by communicable diseases		
Knowledge	Assessment Methods	GMP Domains
Understand the principles of infection control as defined by the GMC	E, Mi, C, ACAT	1
Understand the principles of preventing infection in high risk groups (e.g. antibiotic use to prevent <i>Clostridium difficile</i>) including understanding the local antibiotic prescribing policy	E, Mi, C, ACAT	1
Understand the role of notification within the UK and identify the principal notifiable diseases for UK and international purposes	E, Mi, C, ACAT	1
Understand the role of the Health Protection Agency and Consultants in Health Protection (previously Consultants in Communicable Disease Control – CCDC)	C, ACAT	1
Understand the role of the local authority in relation to infection control	ACAT, C, Mi	1
Skills		
<i>Recognise the potential for infection in patients being cared for</i>	E, Mi, C, ACAT	1, 2
<i>Counsel patients on matters of infection risk, transmission and control</i>	E, Mi, C, ACAT, PS	2, 3
Actively engage in local infection control procedures	ACAT, C	1
<i>Actively engage in local infection control monitoring and reporting processes</i>	ACAT, C	1, 2
<i>Prescribe antibiotics according to local antibiotic guidelines</i>	ACAT, C, Mi	1,2
<i>Recognise potential for cross-infection in clinical settings</i>	E, ACAT, C, Mi	1, 2
<i>Practice aseptic technique whenever relevant</i>	D	1,2
Behaviours		

Encourage all staff, patients and relatives to observe infection control principles	E, ACAT, C, M	1, 3
Level Descriptor		
1	<p>Always follows local infection control protocols. Including washing hands before and after seeing all patients</p> <p>Is able to explain infection control protocols to students and to patients and their relatives. Always defers to the nursing team about matters of ward management</p> <p>Aware of infections of concern – including MRSA and C. difficile</p> <p>Aware of the risks of nosocomial infections</p> <p>Understands the links between antibiotic prescription and the development of nosocomial infections</p> <p>Always discusses antibiotic use with a more senior colleague</p>	
2	<p>Demonstrate ability to perform simple clinical procedures utilising aseptic technique</p> <p>Manage simple common infections in patients using first-line treatments. Communicating effectively to the patient the need for treatment and any messages to prevent re-infection or spread</p> <p>Liaise with diagnostic departments in relation to appropriate investigations and tests</p>	
3	<p>Demonstrate an ability to perform more complex clinical procedures whilst maintaining aseptic technique throughout</p> <p>Identify potential for infection amongst high risk patients obtaining appropriate investigations and considering the use of second-line therapies</p> <p>Communicate effectively to patients and their relatives with regard to the infection, the need for treatment and any associated risks of therapy</p> <p>Work effectively with diagnostic departments in relation to identifying appropriate investigations and monitoring therapy</p> <p>Working in collaboration with external agencies in relation to reporting notifiable diseases, and collaborating over any appropriate investigation or management</p>	

4	<p>Demonstrate an ability to perform most complex clinical procedures whilst maintaining full aseptic precautions, including those procedures which require multiple staff in order to perform the procedure satisfactorily</p> <p>Identify the possibility of unusual and uncommon infections and the potential for atypical presentation of more frequent infections. Managing these cases effectively with potential use of tertiary treatments being undertaken in collaboration with infection control specialists</p> <p>Work in collaboration with diagnostic departments to investigate and manage the most complex types of infection including those potentially requiring isolation facilities</p> <p>Work in collaboration with external agencies to manage the potential for infection control within the wider community including communicating effectively with the general public and liaising with regional and national bodies where appropriate</p>
Emergency department context	
1	<p><i>Washes hands between patients</i></p> <p><i>Does not eat on the shop floor</i></p> <p><i>Clears up trolleys after procedures</i></p> <p><i>Safely disposes of all sharps</i></p> <p><i>Uses gloves in all venepuncture or invasive procedures and goggles for high risk procedures in resus</i></p>
2	<p><i>Inserts central line, chest drain, arterial line, catheter under aseptic conditions</i></p> <p><i>Notifies all infectious diseases including common ED presentations (meningococcal, malaria, food poisoning)</i></p> <p><i>Follows H1N1 national guidance for reduction of transmission</i></p>
3	<p><i>Recognises and takes appropriate action in potential infection including use of masks, aprons, closed cubicles (e.g. diarrhoea, haemoptysis)</i></p>
4	<p><i>Uses blood cultures appropriately with good technique and for appropriate indications</i></p> <p><i>Starts antibiotics within 1 hour for septic patients</i></p>
Leadership	<p>Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction</p>
Demonstrating personal qualities	<p><i>Promotes and reminds others to use hand gel and wash hands **</i></p> <p><i>Supports Trust policies on infection control including 'bare below the elbows'</i></p> <p><i>Always wears clean scrubs or appropriate shirts /tops **</i></p>

Working with others	Identifies and reminds staff who are not following infection control measures **
Managing the service	<i>Ensures antibiotic prescribing protocols available and followed</i> Discusses antibiotic prescribing on every relevant patient on board rounds or when supervising **
Improving services	Audits and takes action on antibiotic prescribing ***
Setting direction	Reviews departmental infection control processes including isolation space, pandemic flu policy, hand washing facilities *

CC11 Managing long term conditions and promoting patient self-care

Knowledge	Assessment Methods	GMP Domains
Recall the natural history of diseases that run a chronic course	E, C, Mi, ACAT	1
<i>Define the role of rehabilitation services and the multi-disciplinary team to facilitate long-term care</i>	E, C, Mi, ACAT	1,2
Outline the concept of quality of life and how this can be measured	C	1
Outline the concept of patient self-care	C, Mi	1
Know, understand and be able to compare medical and social models of disability	C	1
<i>Understand the relationship between local health, educational and social service provision including the voluntary sector</i>	C	1,2
Skills		
<i>Develop and agree a management plan with the patient (and carers), ensuring comprehension to maximise self-care within care pathways when relevant</i>	E, C, Mi, ACAT	1, 2,3
Develop and sustain supportive relationships with patients with whom care will be prolonged	C, Mi	1, 4
<i>Provide effective patient education, with support of the multi-disciplinary team</i>	E, C, Mi, ACAT	1, 2,3, 4
Promote and encourage involvement of patients in appropriate support networks, both to receive support and to give support to others	E, C, PS	1, 3
Encourage and support patients in accessing appropriate information	E, C, PS	1, 3
Provide the relevant and evidence-based information in an appropriate medium to enable sufficient choice, when possible	E, C, PS	1, 3

Behaviours			
	<i>Show willingness to act as a patient advocate, enable patient to report and respond to patient safety issues</i>	E, C, Mi, ACAT	2,3, 4
	Recognise the impact of long-term conditions on the patient, family and friends	E, C, Mi, ACAT	1
	<i>Ensure equipment and devices relevant to the patient's care are discussed</i>	C, Mi, ACAT	1,2
	Put patients in touch with the relevant agency including the voluntary sector from where they can procure the items as appropriate (i.e. equipment, wheelchairs etc)	ACAT, C, Mi	1, 3
	<i>Provide the relevant tools and devices when possible</i>	ACAT, C ,Mi	1, 2
	Show willingness to facilitate access to the appropriate training and skills in order to develop the patient's confidence and competence to self-care	ACAT, C, Mi, PS	1, 3,4
	<i>Show willingness to maintain a close working relationship with other members of the multi-disciplinary team, primary and community care</i>	ACAT, C, MI, M	2,3
	Recognise and respect the role of family, friends and carers in the management of the patient with a long-term condition	ACAT, C, Mi, PS	1,3
Level Descriptor			
1	<p>Describes relevant long-term conditions</p> <p>Understands the meaning of quality of life</p> <p>Is aware of the need for promotion of patient self-care</p> <p>Helps the patient with an understanding of their condition and how they can promote self-management</p>		
2	<p>Demonstrates awareness of management of relevant long term conditions</p> <p>Is aware of the tools and devices that can be used in long term conditions</p> <p>Is aware of external agencies that can improve patient care</p> <p>Teaches the patient and within the team to promote excellent patient care</p>		
3	<p>Develops management plans in partnership with the patient that are pertinent to the patient's long term condition</p> <p>Can use relevant tools and devices in improving patient care</p> <p>Engages with relevant external agencies to promote patient care</p>		

4	Provides leadership within the multi-disciplinary team that is responsible for management of patients with long-term conditions Helps the patient networks develop and strengthen
Emergency department context	
1	Makes appropriate referrals to occupational therapy or physiotherapy with clear reason for referral Attempts to assess social situation and activities of daily living in elderly patients or in those with disabilities
2	<i>Refers to discharge team or community care team appropriately, ensures continuity of care</i> Seeks feedback on their referrals Requests hospital notes for patients with long-term conditions even in simple presentations recognising the impact of chronic disease
3	Actively works with the other professions to complete a holistic assessment of the patient in their personal circumstances
4	Seeks out information for the patient of self-help groups or other support systems in the community prior to discharge via the internet Seeks advice of primary care physicians in the department for alternative treatments or care providers in the community
Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	<i>Always takes a social history including details of carers and support systems</i> <i>Seeks alternative source of information if the patient is unable to give this information</i>
Working with others	Actively involves nursing, OT, PT and other staff in the assessment and planning care of the patient Includes PAMS in briefings about departmental policies/changes promoting team approach

Managing the service	<p>Avoids admission for non-medical reasons utilising community teams where possible</p> <p>Uses CDU/observation ward effectively with limited stay for frail elderly or social presentations **</p>
Improving services	<p>Ensures information on community services available in the department</p> <p>Reminds junior colleagues of the importance of other professionals</p> <p>Invites other services to team teaching for information dissemination</p>
Setting direction	<p>Has regular planned meetings with discharge team to ensure maximal benefit to department</p>

Issues of communication with both 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

CC12 Relationships with patients and communication within a consultation

Communicate effectively and sensitively with patients, relatives and carers		
Knowledge	Assessment Methods	GMP Domains
Structure an interview appropriately	E, ACAT, C, Mi, PS	1
<i>Understand the importance of the patient's background, culture, education and preconceptions (ideas, concerns, expectations) to the consultation process and how it influences communication</i>	ACAT, C, Mi, PS	1,2
Skills		
Establish a rapport with the patient and any relevant others (e.g. carers)	E, ACAT, C, Mi, PS	1, 3
<i>Listen actively and question sensitively to guide the patient and to clarify information</i>	E, ACAT, C, Mi, PS	1, 2,3
Identify and manage communication barriers, tailoring language to the individual patient and using interpreters when indicated	E, ACAT, C, Mi, PS	1, 3
Deliver information compassionately, being alert to and managing their and your emotional response (anxiety, antipathy etc)	E, ACAT, C, Mi	1, 3,4
<i>Use, and refer patients to, appropriate written and other information sources</i>	E, ACAT, C, Mi	1, 2,3
<i>Check the patient's/carer's understanding, ensuring that all their concerns/questions have been covered</i>	E, ACAT, C, Mi	1, 2,3
Indicate when the interview is nearing its end and conclude with a summary	E, ACAT, C, Mi	1, 3
<i>Make accurate contemporaneous records of the discussion</i>	ACAT, C, Mi	1, 2,3
<i>Manage follow-up effectively and ensure "safety net" is in place</i>	ACAT, C, Mi	1,2

Behaviours		
Approach the situation with courtesy, empathy, compassion and professionalism, especially by appropriate body language - act as an equal not a superior	E, ACAT, C, Mi, M, PS	1, 3, 4
Ensure that the approach is inclusive and patient centred and respect the diversity of values in patients, carers and colleagues	E, ACAT, C, Mi, M, PS	1, 3
Be willing to provide patients with a second opinion	E, ACAT, C, Mi, M, PS	1, 3
Use different methods of ethical reasoning to come to a balanced decision where complex and conflicting issues are involved	E, ACAT, C, Mi, M	1, 3
Be confident and positive in one's own values	E, ACAT, C, Mi	1, 3
Level Descriptor		
1	<i>Conducts simple interviews with due empathy and sensitivity and make accurate records</i>	
2	<i>Conducts interviews on complex concepts satisfactorily, confirming that accurate two-way communication has occurred</i>	
3	<i>Handles communication difficulties appropriately, involving others as necessary; establishes excellent rapport</i>	
4	<i>Shows mastery of patient communication in all situations, anticipating and managing any difficulties which may occur</i>	
Emergency department context		
1	Takes focused history in most situations and makes appropriate record Uses open and closed questions	
2	Takes focused history in all patients Adjusts questioning technique to presentation <i>Uses an interpreter or language line as appropriate</i>	

3	<p>Elicits history while resuscitating patient</p> <p>Avoids confrontation and manages conflict in aggressive or drunk patients</p> <p><i>Communicates effectively with anxious parents</i></p>
4	<p>Avoids complaints regarding communication</p> <p>Supports others in resolving conflict between patients and doctors or nurses</p> <p><i>Recognises and is able to manage aggression and violence, including in the acutely disturbed psychiatric patient</i></p> <p>Is able to demonstrate safe and lawful restraint technique in the ED</p>
Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	<i>Listens effectively without interrupting</i>
Working with others	Makes suggestions for change to other trainees with communication difficulties
Managing the service	Promotes use of language line, interpreters, PALS services
Improving services	Contributes to development of structured ED record or electronic solution *
Setting direction	Includes communication skills teaching in delivered to all staff

CC13 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		
Knowledge	Assessment Methods	GMP Domains
Recognise that the way in which bad news is delivered significantly affects the subsequent relationship with the patient	E, ACAT, C, Mi, M, PS	1
Recognise that every patient may desire different levels of explanation and have different responses to bad news	E, ACAT, C, Mi, M, PS	1, 4
Recognise that bad news is confidential but the patient may wish to be accompanied	E, ACAT, C, Mi, M, PS	1
Recognise that breaking bad news can be extremely stressful for the doctor or professional involved	E, ACAT, C, Mi, M	1, 3
Understand that the interview may be an educational opportunity	E, ACAT, C, Mi, M	1
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 Structuring the interview Being honest, factual, realistic and empathic Being aware of relevant guidance documents	E, ACAT, C, Mi	1, 3
Understand that "bad news" may be expected or unexpected	E, ACAT, C, Mi	1
Recognise that sensitive communication of bad news is an essential part of professional practice	E, ACAT, C, Mi	1
Understand that "bad news" has different connotations depending on the context, individual, social and cultural circumstances	E, ACAT, C, Mi, M	1
Recall that a post mortem examination may be required and understand what this involves	E, ACAT, C, Mi, M, PS	1
Recall the local organ retrieval process	ACAT, C, Mi	1

Skills		
Demonstrate to others good practice in breaking bad news	E, C, D, M	1, 3
<i>Involve patients and carers in decisions regarding their future management</i>	E, C, D, M	1, 2,3, 4
Encourage questioning and ensure comprehension	E, C, D, M	1, 3
Respond to verbal and visual cues from patients and relatives	E, C, D, M	1, 3
Act with empathy, honesty and sensitivity avoiding undue optimism or pessimism	E, C, D, M	1, 3
Structure the interview e.g. set the scene, establish understanding, Discuss: diagnosis, implications, treatment, prognosis and subsequent care	E, C, D, M	1, 3
Behaviours		
Take leadership in breaking bad news	C, D, M	1
Respect the different ways people react to bad news	C, D, M	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's reactions	

3	<p>Able to break bad news in unexpected and planned settings</p> <p>Clear structure to interview</p> <p>Establishes what patient wants to know and ensures understanding</p> <p>Able to conclude interview</p>
4	<p>Skilfully delivers bad news in any circumstance including adverse events</p> <p>Arranges follow-up as appropriate</p> <p>Able to teach others how to break bad news</p>
Emergency department context	
1	<p>Attends with middle grade or consultant to break bad news of patient's death</p> <p>Attends BBN teaching session or completes e-learning</p>
2	<p>Leads interview under supervision to break bad news</p> <p>Prepares appropriately checking identity of relative and event information available</p> <p>Able to discuss the coroner's role in unexpected death including probable post mortem</p> <p>Able to discuss life-threatening conditions with patient with realistic presentation of risks and likely outcomes</p>
3	<p>Under supervision, breaks bad news to parents</p> <p>Ensures post mortem is requested in relevant cases (non-mandatory)</p> <p>Understands possibility of death certification in selected cases</p>
4	<p>Able to break bad news in all situations</p> <p>Able to supervise others</p> <p>Able to discuss organ donation</p> <p>Able to lead resuscitation with relatives present</p>

Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Empathic to relatives
Working with others	Recognises impact of death (particularly children) on staff Supports junior trainees in debriefing after BBN
Managing the service	Utilises space appropriately for relatives including circumstances when more than one seriously ill or deceased patient
Improving services	Attends communication teaching for BBN *** Seeks out advice and guidance from different religious leaders for accommodating varying ethnic or cultural backgrounds
Setting direction	Contributes to policies on bereavement and care of relatives ***

CC14 Complaints and medical error

Knowledge	Assessment Methods	GMP Domains
<p>Basic consultation techniques and skills described for Foundation programme and to include:</p> <p>Define the local complaints procedure</p> <p>Recognise factors likely to lead to complaints (poor communication, dishonesty etc)</p> <p>Adopt behaviour likely to prevent complaints</p> <p>Dealing with dissatisfied patients or relatives</p> <p>Recognise when something has gone wrong and identify appropriate staff to communicate this with</p> <p>Act with honesty and sensitivity in a non-confrontational manner</p>	C, D, M	1
Outline the principles of an effective apology	C, D, M	1
Identify sources of help and support when a complaint is made about yourself or a colleague	C, D, M	1
Skills		
Contribute to processes whereby complaints are reviewed and learned from	C, D, M	1
Explain comprehensibly to the patient the events leading up to a medical error	C, D, M	1, 3
Deliver an appropriate apology	C, D, M	1, 3, 4
Distinguish between system and individual errors	C, D, M	1
Show an ability to learn from previous error	C, D, M	1
Behaviours		
Take leadership over complaint issues	C, D, M	1
Recognise the impact of complaints and medical error on staff, patients, and the National Health Service	C, D, M	1, 3

<i>Contribute to a fair and transparent culture around complaints and errors</i>		C, D, M	1,2
Recognise the rights of patients, family members and carers to make a complaint		C, D, M	1, 4
Level Descriptor			
1	<i>Defines the local complaints procedure</i> <i>Recognises need for honesty in management of complaints</i> <i>Responds promptly to concerns that have been raised</i> <i>Understands the importance of an effective apology</i> <i>Learns from errors</i>		
2	<i>Manages conflict without confrontation</i> <i>Recognises and responds to the difference between system failure and individual error</i>		
3	<i>Recognises and manages the effects of any complaint within members of the team</i>		
4	<i>Provides timely accurate written responses to complaints when required</i> <i>Provides leadership in the management of complaints</i>		
Emergency department context			
1	<i>Responds to request for statements regarding a complaint within one week of receiving request</i> <i>Acknowledges shortcomings in care and is not defensive</i>		
2	<i>Seeks review from MDU/MPS on statement where appropriate</i> <i>Appropriately assesses individual contribution to complaint and apologises appropriately</i>		
3	<i>Recognises when complaint well founded and distinguishes from general patient dissatisfaction, changing behaviour where appropriate</i>		
4	<i>Can manage a complaint and write a draft response</i> <i>Ensures that patient safety issues are identified and appropriately dealt with in any form of complaint.</i>		
Leadership	<i>Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction</i>		
Demonstrating personal qualities	<i>Accepts criticism from patient and demonstrates personal awareness and willingness to change</i>		

	Recognises the pressure of the ED can lead to complaints and takes steps to mitigate against the risk of poor communication, or attitudinal problems
Working with others	Supports junior trainees in responding to complaint
Managing the service	Manages complaint in timely way and delivers on action plan from complaint *
Improving services	<i>Uses complaints to guide ED service review and development</i>
Setting direction	<i>Aims to reduce complaints by analysis of most common reasons and increasing staff awareness of risk ***</i>

CC15 Communication 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		
Knowledge	Assessment Methods	GMP Domains
<i>Understand the section in "Good Medical Practice" on Working with Colleagues, in particular:</i>	C, M, ESLE	1,2
<i>The roles played by all members of a multi-disciplinary team</i>	C, M, ESLE	1,2
<i>The features of good team dynamics</i>	C, M, ESLE	1,2
<i>The principles of effective inter-professional collaboration to optimise patient or population care</i>	C, M, ESLE	1,2
Skills		
<i>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</i>	ACAT, C, Mi, ESLE, S	1,2, 3
<i>Utilise the expertise of the whole multi-disciplinary team as appropriate, ensuring when delegating responsibility that appropriate supervision is maintained</i>	ACAT, C, Mi, M, ESLE, S	1, 3
<i>Participate in, and co-ordinate, an effective hospital-at-night team when relevant</i>	ACAT, C, Mi, M, ESLE	1
<i>Communicate effectively with administrative bodies and support organisations</i>	C, Mi, M, ESLE, S	1, 3
<i>Employ behavioural management skills with colleagues to prevent and resolve conflict</i>	ACAT, C, Mi, M, ESLE, S	1, 3

Behaviours			
	Be aware of the importance of, and take part in, multi-disciplinary work, including adoption of a leadership role when appropriate	ACAT, C, Mi, M, ESLE	3
	<i>Foster a supportive and respectful environment where there is open and transparent communication between all team members</i>	ACAT, C, Mi, M, ESLE, S	1, 2, 3
	Ensure appropriate confidentiality is maintained during communication with any member of the team	ACAT, C, Mi, M, ESLE	1, 3
	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, Mi, M, ESLE	1
	<i>Be prepared to accept additional duties in situations of unavoidable and unpredictable absence of colleagues</i>	C, M, ESLE	1,2
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		
Emergency department context			
1	Recognises role of nurse in charge, lead registrar and consultant, Appreciates vital role of all members of team including administrative and portering staff		
2	Able to tell named nurse and/or nurse in charge the patient plan <i>Ensures effective handover of patients to other doctor at end of shift</i>		

3	<p>Identifies early when potential conflict is arising between ED staff and specialties or within ED team and takes appropriate action – particularly over weak referrals or lack of response from specialties</p> <p>Deals with breakdown in referral or request for imaging and resolves conflict achieving good patient outcome</p>
4	<p><i>Manages the shift to ensure all doctors have required breaks and leave on time</i></p> <p><i>Ensures the primacy of patient safety in all aspects of communication and cooperation and is able to utilise cognitive strategies, human factors and CRM to maximise this</i></p>
Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Demonstrates respect for nursing staff in behaviour, tone and inclusion in decision making
Working with others	<p><i>Works with nurse in charge to effectively manage workload and patient throughput **</i></p> <p>Develops close working relationship with key specialties including medical registrar, Intensive Care Medicine registrar and paediatric registrar to ensure team working and effective patient care **</p>
Managing the service	<p>Ensures rota and staffing up to date and displayed at all times</p> <p>Is aware of workload of individual doctors during shifts and ensures no overload or no inappropriate relaxing</p>
Improving services	Asks for feedback from specialty doctors and investigative services on ED requests for support
Setting direction	Works with medical staffing and workforce planning to ensure appropriate competences in team 24/7 for emergencies in the ED and hospital

For all Emergency Physicians there is a need to be aware of public health issues and health promotion. Competences that promote this awareness are defined in the next section

CC16 Health promotion and public health

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.		
Knowledge	Assessment Methods	GMP Domains
Understand the factors which influence the incidence and prevalence of common conditions	E, C, Mi	1
Understand the factors which influence health – psychological, biological, social, cultural and economic (especially poverty)	E, C, Mi	1
Understand the influence of lifestyle on health and the factors that influence an individual to change their lifestyle	E, C, Mi	1
Understand the purpose of screening programmes and know in outline the common programmes available within the UK	E, C, Mi	1
Understand the relationship between the health of an individual and that of a community	E, C, Mi	1
Know the key local concerns about health of communities such as smoking and obesity	E, C, Mi	1
Understand the role of other agencies and factors including the impact of globalisation in protecting and promoting health	E, C, Mi	1
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 developing countries	E, C, Mi	1
Outline the major causes of global morbidity and mortality and effective, affordable interventions to reduce these	E, C, Mi	1
<i>Recall the effect of addictive behaviours, especially substance misuse and gambling, on health and poverty</i>	E, C, Mi	1,2

Skills		
Identify opportunities to prevent ill health and disease in patients	E, C, Mi, PS	1, 2
Identify opportunities to promote changes in lifestyle and other actions which will positively improve health	E, C, Mi	1, 2
Identify the interaction between mental, physical and social wellbeing in relation to health	E, C, Mi	1
Counsel patients appropriately on the benefits and risks of screening	E, C, Mi PS	1, 3
Work collaboratively with other agencies to improve the health of communities	E, C, Mi	1
Behaviours		
Engage in effective team-working around the improvement of health	C, M	1, 3
Encourage where appropriate screening to facilitate early intervention	C	1
Level Descriptor		
1	<p>Discusses with patients and others factors which could influence their personal health</p> <p><i>Maintains own health and is aware of own responsibility as a doctor for promoting healthy approach to life</i></p>	
2	<p>Communicates to an individual, information about the factors which influence their personal health</p> <p>Supports an individual in a simple health promotion activity (e.g. smoking cessation)</p>	
3	<p>Communicate to an individual and their relatives, information about the factors which influence their personal health</p> <p>Supports small groups in a simple health promotion activity (e.g. smoking cessation)</p> <p>Provides information to an individual about a screening programme and offer information about its risks and benefits</p>	
4	<p>Discusses with small groups the factors that have an influence on their health and describes initiatives they can undertake to address these</p> <p>Provides information to an individual about a screening programme offering specific guidance in relation to their personal health and circumstances</p>	

	<p>concerning the factors that would affect the risks and benefits of screening to them as an individual</p> <p>Engages with local or regional initiatives to improve individual health and reduce inequalities in health between communities</p>
Emergency department context	
1	<p>Takes a drug, alcohol and smoking history in all relevant patients</p> <p><i>Takes adequate rest between shifts, does not take on locum shifts at weekends</i></p>
2	<p>Gives advice on stopping smoking or reducing alcohol use or refers to alcohol health worker</p>
3	<p>Recognises other high risk patient behaviours and gives advice for example in hypertension, obesity and diet</p>
4	<p>Ensures GP is aware of any attendances and high risk presentations</p>
Leadership	<p>Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction</p>
Demonstrating personal qualities	<p><i>Maintains healthy lifestyle</i></p> <p>Is registered with a doctor ***</p>
Working with others	<p>Reminds staff about alcohol, drugs and smoking history</p> <p><i>Discourages high risk behaviour in colleagues</i></p>
Managing the service	<p>Ensures information regarding local drug, alcohol, smoking services is available in the department</p>
Improving services	<p>Works with local services to improve accessibility to services</p>
Setting direction	<p>Promotes screening where appropriate e.g. routine BP recording and informing GP in all over 40s</p>

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

CC17 Principles of medical ethics and confidentiality

To know, understand and apply appropriately the principles, guidance and laws regarding medical ethics and confidentiality		
Knowledge	Assessment Methods	GMP Domains
Demonstrate knowledge of the principles of medical ethics	E, ACAT, C, Mi	1
Outline and follow the guidance given by the GMC on confidentiality	E, ACAT, C, Mi	1
Define the provisions of the Data Protection Act and Freedom of Information Act	E, ACAT, C, Mi	1
Define the role of the Caldicott Guardian within an institution, and outline the process of attaining Caldicott approval for audit or research	E, ACAT, C, Mi	1, 4
Outline situations where patient consent, while desirable, is not required for disclosure e.g. communicable diseases, public interest	E, ACAT, C, Mi	1, 4
Outline the procedures for seeking a patient's consent for disclosure of identifiable information	E, ACAT, C, Mi	1
Recall the obligations for confidentiality following a patient's death	E, ACAT, C, Mi	1, 4
<i>Recognise the problems posed by disclosure in the public interest, without patient's consent, recognising this may impact on patients seeking help in future</i>	E, ACAT, C, Mi	1, 2,4
Recognise the factors influencing ethical decision making: religion, moral beliefs, cultural practices	ACAT, C, Mi	1
Do not resuscitate: Define the standards of practice defined by the GMC when deciding to withhold or withdraw life-prolonging treatment	ACAT, C, Mi	1
Outline the principles of the Mental Capacity Act	ACAT, C, Mi	1

Skills		
<i>Use and share information with the highest regard for confidentiality, and encourage such behaviour in other members of the team</i>	ACAT, C, Mi, M	1, 2,3
Use and promote strategies to ensure confidentiality is maintained e.g. anonymisation	C	1
Counsel patients on the need for information distribution within members of the immediate healthcare team	E, ACAT, C, M	1, 3
Counsel patients, family, carers and advocates tactfully and effectively when making decisions about resuscitation status, and withholding or withdrawing treatment	E, ACAT, C, M PS	1, 3
Behaviours		
Encourage ethical reflection in others	ACAT, C, M	1
Show willingness to seek advice of peers, legal bodies, and the GMC in the event of ethical dilemmas over disclosure and confidentiality	E, ACAT, C, M	1
<i>Respect patient's requests for information not to be shared, unless this puts the patient, or others, at risk of harm</i>	E, ACAT, C, M, PS	1, 2,4
Show willingness to share information about their care with patients, unless they have expressed a wish not to receive such information	ACAT, C, M	1, 3
Show willingness to seek the opinion of others when making decisions about resuscitation status, and withholding or withdrawing treatment	ACAT, C, M, MSF	1, 3
Level Descriptor		
1	<p>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</p> <p>Familiarity with the principles of the Mental Capacity Act</p> <p>Participate in decisions about resuscitation status and withholding or withdrawing treatment</p>	

2	Counsel patients on the need for information distribution within members of the immediate healthcare team and seek patient's 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
Emergency department context	
1	<p>Disposes of notes and results in confidential waste bin</p> <p>Follows telephone enquiry policy appropriately – not divulging information to third parties</p> <p>Does not share passwords with others for computers</p>
2	<p><i>Follows policy for sharing information with police in serious arrestable offences</i></p> <p>Asks patient's permission to disclose information to relatives or third parties</p> <p>Understands need for patient confidentiality in cases of abuse, assault or other circumstances</p> <p>Does not share passwords on the computers</p> <p>Does not take ED records home for completion of police statements</p>
3	<p>Follows policy on data downloads to portfolios, or for audit</p> <p>Case presentations anonymised appropriately</p>
4	Contributes to DNAR decisions in the ED and ensures paperwork completed

Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Does not gossip or discuss patients in the staff room ** Intervenes when others are breaking confidentiality **
Working with others	Cooperates with police requests for information but explains confidentiality limits ** <i>Shares relevant data with social services, safeguarding children services</i>
Managing the service	Ensures passwords are updated regularly for the computer Reports breaches of confidentiality as incidents Utilises confidential waste bins **
Improving services	Seeks feedback from GPs on clinical information sharing in discharge letters
Setting direction	Actively promotes data protection and confidentiality by ensuring training for all staff and policies are clear

CC18 Valid consent

To obtain valid consent from the patient		
Knowledge	Assessment Methods	GMP Domains
Outline the guidance given by the GMC on consent, in particular:	C, D, M	1
Understand that consent is a process that may culminate in, but is not limited to, the completion of a consent form	C, D, M	1
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
Skills		
Present all information to patients (and carers) in a format they understand, allowing time for reflection on the decision to give consent	E, ACAT, C, Mi, PS	1, 3
Provide a balanced view of all care options	E, ACAT, C, Mi, PS	1, 3, 4
Behaviours		
<i>Respect a patient's rights of autonomy even in situations where their decision might put them at risk of harm</i>	E, ACAT, C, Mi, PS	1, 2
Avoid exceeding the scope of authority given by a patient	E, ACAT, C, Mi, PS	1
Avoid withholding information relevant to proposed care or treatment in a competent adult	E, ACAT, C, Mi, PS	1, 3, 4
Show willingness to seek advance directives	E, ACAT, C, Mi, PS	1, 3
Show willingness to obtain a second opinion, senior opinion, and legal advice in difficult situations of consent or capacity	E, ACAT, C, Mi, PS	1, 3
Inform a patient and seek alternative care where personal, moral or religious belief prevents a usual professional action	E, ACAT, C, Mi, PS	1, 3, 4

Level Descriptor	
1	Obtains consent for straightforward treatments with appropriate regard for patient's autonomy
2	<i>Able to explain complex treatments meaningfully in layman's terms and thereby to obtain appropriate consent</i>
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 and is able to take appropriate steps to administer treatment consistent with the least restrictive option principle of the MCA (Mental Capacity Act).
Emergency department context	
1	<p>Consents patients verbally and notes the consent for minor procedures such as suturing and abscess drainage</p> <p><i>Gains written consent for procedures requiring sedation or intravenous anaesthesia in line with local departmental protocols e.g. Biers block, conscious sedation for shoulder reduction</i></p>
2	Explains likely benefits/risks of thrombolysis for STEMI/stroke and PCCI for STEMI
3	Allows patient autonomy but explains risks of self-discharge in poisoning or self harm
4	<p>Uses patient advocate system or hospital management/legal department where incapacity means patient unable to consent</p> <p>Applies Mental Capacity Act in relevant cases</p> <p>Is able to provide advice on dealing with consent about treatment refusals in patients with possible capacity issues, such as in attempted suicide or with needle phobia</p> <p>Understands the principles of validity and applicability for advance decisions relating to life-sustaining treatment in the ED</p>

Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Seeks consent and documents accurately Explains fully and accepts patient's views
Working with others	Supports specialties in gaining consent for surgical or invasive procedures in the ED Always documents capacity when dealing with patients who self-discharge
Managing the service	Conducts audit of clinical procedures completed in the ED and develops action plan to ensure consent and other standards are met ***
Improving services	Explores patient advocacy service in the Trust
Setting direction	Ensure training for all staff including nurses on consent and capacity in the ED

CC19 Legal framework for practice

To understand the legal framework within which health-care is provided in the UK in order to ensure that personal clinical practice is always provided in line with this legal framework		
Knowledge	Assessment Methods	GMP Domains
All decisions and actions must be in the best interests of the patient	E, ACAT, C, Mi	1
Understand the legislative framework within which healthcare is provided in the UK – in particular; death certification and the role of the Coroner/Procurator Fiscal; <i>safeguarding children legislation;</i> <i>mental health legislation (including powers to detain a patient and giving emergency treatment against a patient's will under common law);</i> <i>advanced directives and living Wills;</i> <i>withdrawing and withholding treatment;</i> decisions regarding resuscitation of patients; surrogate decision making; organ donation and retention; <i>communicable disease notification;</i> <i>medical risk and driving;</i> Data Protection and Freedom of Information Acts; provision of continuing care and community nursing care by a local authorities	ACAT, C, Mi	1, 2
Understand the differences between legislation in the four countries of the UK	ACAT, C, Mi	1
Understand sources of medico-legal information	ACAT, C, Mi	1
Understand disciplinary processes in relation to medical malpractice	ACAT, C, Mi, M	1

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	ACAT, C, Mi, M	1
Skills		
Ability to cooperate with other agencies with regard to legal requirements – including reporting to the Coroner's Officer or the proper officer of the local authority in relevant circumstances	ACAT, C, Mi	1
Ability to prepare appropriate medico-legal statements for submission to the Coroner's Court, Procurator Fiscal, Fatal Accident Inquiry and other legal proceedings	C, M	1
Be prepared to present such material in court	C, Mi	1
Incorporate legal principles into day to day practice	ACAT, C, Mi	1
Practice and promote accurate documentation within clinical practice	ACAT, C, Mi	1, 3
Behaviours		
Show willingness to seek advice from the Trust, legal bodies (including defence unions), and the GMC on medico-legal matters	ACAT, C, Mi, M	1
Promote reflection on legal issues by members of the team	ACAT, C, Mi, M	1, 3
Level Descriptor		
1	<p>Demonstrates knowledge of the legal framework associated with medical qualification and medical practice and the responsibilities of registration with the GMC</p> <p>Demonstrates knowledge of the limits to professional capabilities - particularly those of pre-registration doctors</p>	
2	<p>Identify with senior team members cases which should be reported to external bodies and where appropriate and initiate that report.</p> <p>Identify with senior members of the clinical team situations where you feel consideration of medico-legal matters may be of benefit. Be aware of local Trust procedures around substance abuse and clinical malpractice.</p>	

3	<p>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</p> <p>Actively promote discussion on medico-legal aspects of cases within the clinical environment</p> <p>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</p>
4	<p>Work with external strategy bodies around cases that should be reported to them. Collaborating with them on complex cases providing full medico-legal statements as required and present material in court where necessary</p> <p>Lead the clinical team in ensuring that medico-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</p>
Emergency department context	
1	<p>Maintains full registration and membership of a defence society, seeking advice where necessary on responses to complaints</p> <p>Supports FY1s in the department and ensures they work within limits, including not discharging patients</p> <p>Completes police statements promptly and effectively</p> <p>Completes Coroner's reports promptly and effectively</p>
2	<p>Manages information relating to patients as victims of assault including gunshot wounds, attempted murder or domestic violence – reporting these appropriately without breaching confidentiality</p> <p>Follows local vulnerable adults policies – reporting where appropriate and providing adequate information for case conferences</p> <p>Presents evidence in the Coroner's court for patients from the ED</p> <p>Presents evidence in criminal court for victims of assault</p>

3	<p>Manages terminally ill resuscitation patients, appropriately seeking and applying end-of-life decisions or advance directives</p> <p>Manages cases of drug users – by seeking information on standard treatment programme and appropriately providing replacement prescriptions when required and within agreed guidelines</p> <p>Manages drugs of abuse when found on patients in appropriate and legal manner</p> <p>Completes CICA reports appropriately</p>
4	<p>Applies for specialist registration promptly</p> <p>Understands safe and lawful restraint</p>
Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Seeks advice on legal matters from consultant, senior nurse or Trust legal representatives where required
Working with others	<i>Gives advice to junior trainees and nurses regarding self-discharge, disclosure of information or other legal issues – acknowledging where they are not sure **</i>
Managing the service	Ensures shift leaders are fully aware of potential legal problems during the shift by communication and adequate handover from previous shift e.g. deceased patients to the Coroner, high risk patients who have self discharged, police enquiries **
Improving services	<p>Works with local police stations to improve communication and turn around times for police statements</p> <p>Works with the Coroner to set up information sharing *</p>
Setting direction	Make sure legal and ethical dilemmas form part of departmental meetings and policies

CC20 Ethical research

To ensure that research is undertaken using relevant ethical guidelines		
Knowledge	Assessment Methods	GMP Domains
<i>Outline the GMC guidance on good practice in research</i>	ACAT, C	1,2
<i>Outline the differences between audit and research</i>	AA, C, Mi	1,2
Describe how clinical guidelines are produced	C	1
Demonstrate knowledge of research principles	C, Mi	1
Outline the principles of formulating a research question and designing a project	C, Mi	1
Comprehend principal qualitative, quantitative, bio-statistical and epidemiological research methods	C	1
Outline sources of research funding	C	1
Skills		
Develop critical appraisal skills and apply these when reading literature	C	1
Demonstrate the ability to write a scientific paper	C	1
Apply for appropriate ethical research approval	C	1
Demonstrate the use of literature databases	C	1
Demonstrate good verbal and written presentations skills	C, D	1
Understand the difference between population-based assessment and unit-based studies and be able to evaluate outcomes for epidemiological work	C	1

Behaviours			
	<i>Recognise the ethical responsibilities to conduct research with honesty and integrity, safeguarding the interests of the patient and obtaining ethical approval when appropriate</i>	C, M	1,2
	<i>Follow guidelines on ethical conduct in research and consent for research</i>	C	1,2
	Show willingness to the promotion of involvement in research	C	1
Level Descriptor			
1	Obtains Good Clinical Practice (GCP) certification Defines ethical research and demonstrates awareness of GMC guidelines Differentiates audit and research Knows how to use databases		
2	Demonstrates critical appraisal skills		
3	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		

Emergency department context	
1	Conducts effective literature search to determine the audit gold standard
2	Completes a BestBET including the formulation of three-part question, search and review Demonstrates the ability to recruit a patient to a clinical trial
3	Completes a draft CTR Successfully completes a regional mock critical appraisal paper or goes on critical appraisal course Completes an evidence-based guideline in the ED**
4	Completes a successful CTR Successfully submits a research application Completes the RCEM online research governance e-learning
Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Completes draft CTR on time and submits for review by trainers ***
Working with others	Supports audit or research by junior trainees or nurses with advice, direction and providing constructive review
Managing the service	Uses evidence to create guidelines or pathways for patient care * Supports research from ED or other departments into daily practice – contributing to patient recruitment and data collection
Improving services	Introduces the results of high quality research into patient pathways in the ED – including business case development for new equipment, drugs or services or redesigning pathways *
Setting direction	Contributes to strategy for research and audit in the department for a defined period e.g. 5 year plan

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 possible. An awareness of the evidence base behind current practice and a need to audit one's own practice is vital for the physician training in Emergency Medicine.

CC21 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		
Knowledge	Assessment Methods	GMP Domains
Understand the application of statistics in scientific medical practice	E, C	1
Understand the advantages and disadvantages of different study methodologies (randomised controlled trials, case controlled cohort etc)	E, C	1
Understand the principles of critical appraisal	C	1
Understand levels of evidence and quality of evidence	E, C	1
Understand the role and limitations of evidence in the development of clinical guidelines	E, C	1
<i>Understand the advantages and disadvantages of guidelines and the relation to patient safety</i>	C	1,2
Understand the processes that result in nationally applicable guidelines (e.g. NICE and SIGN)	C	1
Skills		
Ability to search the medical literature including use of PubMed, Medline, Cochrane reviews and the internet	C	1
Appraise retrieved evidence to address a clinical question	C	1
<i>Apply conclusions from critical appraisal into clinical care</i>	E, C	1,2
Identify the limitations of research	C	1
Contribute to the construction, review and updating of local (and national) guidelines of good practice using the principles of evidence-based medicine	C	1
Behaviours		

<i>Keep up to date with national reviews and guidelines of practice (e.g. NICE and SIGN)</i>		E, C	1,2
Aim for best clinical practice (clinical effectiveness) at all times, responding to evidence-based medicine		ACAT, C, Mi	1
Recognise the occasional need to practise outside clinical guidelines		ACAT, C, Mi	1
Encourage discussion amongst colleagues on evidence-based practice		ACAT, C, Mi, M	1
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		
Emergency department context			
1	Presents a recent article with critical appraisal at a departmental teaching or audit meeting or incorporates critique into audit presentation		
2	Completes a BestBET including the formulation of three-part question, search and review		
3	Successfully completes the evidence review as basis for a quality improvement project within the ED Completes an evidence-based guideline in the ED**		
4	Successfully completes an evidence based quality improvement project in the ED		

Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Applies national guidelines and specifically refers to them when giving advice to trainees ** <i>Documents clearly in notes any variance from guidelines</i>
Working with others	<i>Directs trainees to guidelines and resources for best evidence</i> Sets up journal club or critical appraisal practice group in hospital or region ***
Managing the service	Ensures guidelines are available on the shop floor via computers, proforma, posters or other means *
Improving services	Seeks out new guidelines and works on modification for department Takes NICE or other guideline, evaluates applicability and feasibility in department and introduces, creating business plan if required **
Setting direction	Undertakes review of guidelines matching departmental library to national library or RCEM website *** Accepts RCEM guidelines and implements

CC22 Audit

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

Level Descriptor	
1	Attendance at departmental audit meetings Contribute data to a local or national audit
2	Identify a problem and develop standards for a local audit
3	Compare the results of an audit with criteria or standards to reach conclusions Use the findings of an audit to develop and implement change Organise or lead a departmental audit meeting
4	Lead a complete clinical audit cycle including development of conclusions, implementation of findings and re-audit to assess the effectiveness of the changes Become audit lead for an institution or organisation
Emergency department context	
1	Completes an audit in the department during CT1 <i>Contributes to RCEM national audit</i>
2	<i>Contributes to regular waiting time target audits and action plans to improve patient throughput</i> Ensures patient experience questionnaires are completed for at least 20% of their own patients (see patient survey tool appendix 2)
3	Supports junior trainees and/or nurses in audit Completes an action plan resulting from an audit
4	Chairs an audit meeting <i>Works with Trust lead for national audits such as TARN or MINAP, NCEPOD contributing data, analysis and action planning</i>

Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Promotes audit with junior trainees as means to improve services
Working with others	Makes suggestions for topics and methodology to junior trainees or nurses Encourages nurse audit by supporting search for evidence, methods and data collection
Managing the service	Uses audit results and makes clear achievable recommendations – ensuring they are enacted by personal work *
Improving services	Completes a re-audit cycle after personal work to implement actions ***
Setting direction	Contributes or designs departmental audit strategy for year to incorporate RCEM national audits, TARN, MINAP, NCEPOD and other key audits for department *

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

CC23 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		
Knowledge	Assessment Methods	GMP Domains
Outline adult learning principles relevant to medical education	C, TO	1
Identification of learning methods and effective learning environments	C, TO	1
Construction of educational objectives	C, TO	1
Use of effective questioning techniques	C, TO	1
Varying teaching format and stimulus	C, TO	1
Demonstrate knowledge of relevant literature relevant to developments in medical education	C, TO	1
Outline the structure of the effective appraisal interview	C, TO	1
Define the roles of the various bodies involved in medical education	C, TO	1
Differentiate between appraisal and assessment and be aware of the need for both	C, TO	1
Outline the workplace based assessments in use and the appropriateness of each	C, TO	1
Demonstrate the definition of learning objectives and outcomes	C, TO	1
<i>Outline the appropriate local course of action to assist the failing trainee</i>	C, TO	1,2

Skills		
Vary teaching format and stimulus, appropriate to situation and subject	C, TO	1
<i>Provide effective feedback after teaching, and promote learner reflection</i>	C, M, TO	1,2
Conduct effective appraisal	C, M, TO	1
Demonstrate effective lecture, presentation, small group and bedside teaching sessions	C, M, TO	1, 3
<i>Provide appropriate career advice, or refer trainee to an alternative effective source of career information</i>	C, M, TO	1, 2,3
Participate in strategies aimed at improving patient education e.g. talking at support group meetings	C, M, TO	1
Be able to lead departmental teaching programmes including journal clubs	C, TO	1
<i>Recognise the trainee in difficulty</i>	C, TO	1,2
Behaviours		
<i>In discharging educational duties acts to maintain the dignity and safety of patients at all times</i>	C, M, TO	1, 2,4
Recognises the importance of the role of the physician as an educator within the multi-professional healthcare team and uses medical education to enhance the care of patients	C, M, TO	1
<i>Balances the needs of service delivery with the educational imperative</i>	C, M, TO	1,2
Demonstrates willingness to teach trainees and other health and social workers in a variety of settings to maximise effective communication and practical skills	C, M, TO	1
Encourages discussions in the clinical settings with colleagues to share knowledge and understanding	C, M, TO	1, 3
Maintains honesty and objectivity during appraisal and assessment	C, M, TO	1

Shows willingness to participate in workplace based assessments	C, M, TO	1
Shows willingness to take up formal tuition in medical education and respond to feedback obtained after teaching sessions	C, M, TO	1, 3
Demonstrates a willingness to become involved in the wider medical education activities and fosters an enthusiasm for medical education activity in others	C, M, TO	1
Recognises the importance of personal development as a role model to guide trainees in aspects of good professional behaviour	C, M, TO	1
Demonstrates consideration for learners including their emotional, physical and psychological wellbeing with their development needs	C, M, TO	1
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, workplace based assessments) Able to appraise a medical student, nurse or other colleague Able to act as a mentor to a medical student, nurses or other 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	

Emergency department context	
1	<p>Develops own learning objectives for the ED attachment</p> <p>Delivers case presentation including literature review to ED teaching session</p> <p>Teaches medical students on the shop floor and seeks and receives good feedback</p>
2	<p>Conducts WBA on FY1 in the ED</p> <p>Supervises nurse, ENP or medical student on blood gas, catheterisation, plaster application etc</p>
3	<p>Contributes to junior trainee appraisal meeting</p> <p>Leads the medical student programme – and supervises attendance, teaching programme and assessments</p>
4	<p>Mentors a nurse in nurse prescribing or ENP skills</p> <p>Leads on junior staff teaching programme – matching sessions to curriculum and delivering at least 6 sessions per year</p> <p>Helps colleague or junior trainees set their own educational objectives</p> <p>Teaches on Trust FY1 or FY2 programme</p> <p>Provides teaching sessions for ambulance personnel or other healthcare professionals</p>

Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	<p>Uses every opportunity on the shop floor to enable others to learn – by asking questions and leading trainee’s decision making to support skills and knowledge acquisition **</p> <p>Seeks out every opportunity to complete WBA – and invites and receives feedback **</p> <p>Ensures personally meets GMC standards for trainers seeking training where educational needs identified ***</p>
Working with others	<p>Leads board rounds in style likely to enable others to learn **</p> <p><i>Debriefs after resuscitations, unexpected events or after shifts to enable others to learn **</i></p> <p>Makes completion of WBA a priority for junior colleagues</p> <p>Gives clear unambiguous feedback for trainees in difficulty or provides statements of fact to consultant for feedback to other trainees</p>
Managing the service	Adjusts supervision style when surge in activity or increased pressure reduces time available but maintains educational principles **
Improving services	Identifies educational needs in the course of every day practice by talking with junior trainees or observing common errors and feeds into the training programme
Setting direction	<p>Ensures named educational supervisor for every trainee</p> <p>Asks to attend and attends training sessions for educational supervision **</p>

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.

CC24 Personal behaviour

To develop the behaviours that will enable the doctor to become a senior leader able to deal with complex situations and difficult behaviours and attitudes. To work increasingly effectively with many teams and to be known to put the quality and safety of patient care as a prime objective To develop the attributes of someone who is trusted to be able to manage complex human, legal and ethical problem. To become someone who is trusted and is known to act fairly in all situations		
Knowledge	Assessment Methods	GMP Domains
<p>Recall and build upon the competences defined in the Foundation Programme:</p> <p>Deal with inappropriate patient and family behaviour</p> <p>Respect the rights of children, elderly, people with physical, mental, learning or communication difficulties</p> <p>Adopt an approach to eliminate discrimination against patients from diverse backgrounds including age, gender, race, culture, disability, spirituality and sexuality</p> <p><i>Place needs of patients above own convenience</i></p> <p>Behave with honesty and probity</p> <p>Act with honesty and sensitivity in a non-confrontational manner</p> <p>The main methods of ethical reasoning: casuistry, ontology and consequentialist</p> <p>The overall approach of value-based practice and how this relates to ethics, law and decision making</p>	ACAT, C, Mi, M, PS, ESLE	1, 2, 3, 4
Define the concept of modern medical professionalism	C	1
Outline the relevance of professional bodies (Royal Colleges, JRCPTB, GMC, Postgraduate Dean, BMA, specialist societies, medical defence organisations)	C	1

Skills		
Practise with: <ul style="list-style-type: none"> • integrity • compassion • altruism • continuous improvement • excellence • respect for cultural and ethnic diversity • regard to the principles of equity 	ACAT, C, Mi, M, PS, ESLE	1, 2, 3, 4
Work in partnership with members of the wider healthcare team	ACAT, C, Mi, M, ESLE	3
Liaise with colleagues to plan and implement work rotas	ACAT, M	3
Promote awareness of the doctor's role in utilising healthcare resources optimally	ACAT, C, Mi, M, ESLE	1, 3
Recognise and respond appropriately to unprofessional behaviour in others	E, ACAT, C, ESLE	1
Be able to provide specialist support to hospital and community based services	ACAT, C, M, ESLE	1
Be able to handle enquiries from the press and other media effectively	C, D	1, 3
Behaviours		
Recognise personal beliefs and biases and understand their impact on the delivery of health services	ACAT, C, Mi, M, ESLE	1
Recognise the need to use all healthcare resources prudently and appropriately	ACAT, C, Mi, ESLE	1, 2
Recognise the need to improve clinical leadership and management skill	ACAT, C, Mi, ESLE	1
Recognise situations when it is appropriate to involve professional and regulatory bodies	ACAT, CbD, Mini-CEX, ESLE	1
Show willingness to act as a mentor, educator and role model	ACAT, C, Mi, M, ESLE	1

Be willing to accept mentoring as a positive contribution to promote personal professional development	ACAT, CbD, Mini-CEX, ESLE	1
Participate in professional regulation and professional development	C, Mi, M, ESLE	1
Takes part in 360 degree feedback as part of appraisal	C, M	1, 2, 4
Recognise the right for equity of access to healthcare	ACAT, C, Mi, ESLE	1
Recognise need for reliability and accessibility throughout the healthcare team	ACAT, C, Mi, M, ESLE	1
Level Descriptor		
1	<p>Works work well within the context of multi-professional teams</p> <p>Listens well to others and takes other viewpoints into consideration</p> <p>Supports patients and relatives at times of difficulty e.g. after receiving difficult news</p> <p>Is polite and calm when called or asked to help</p>	
2	<p>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</p> <p>Wherever possible involves patients in decision making</p>	
3	<p>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</p>	
4	<p>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</p>	
5	<p>Engenders trust so that staff feel confident about sharing difficult problems and feel able to point out deficiencies in care at an early stage</p>	

Emergency department context	
1	Remains calm and professional during times of surges in numbers of patients or acuity Retains concentration during quiet periods of work Seeks help appropriately and acts on advice
2	Works well with the nursing staff dealing with individual patients – both supporting them and also seeking their viewpoint
3	Takes responsibility for the department for a shift recognising the need to distribute work and support decision making by others Monitors the wellbeing of other staff – identifying staff in difficulty (including nurses, receptionists and porters) to the relevant senior member of staff
4	Provides an acceptable role model for the junior staff even under pressure or when not at work, demonstrating integrity and adherence to professional standards
Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	Completes multi-source feedback for others when asked Is consistent in manner and mood whatever the departmental status **
Working with others	Encourages others including patients, to contribute to management discussions on board rounds or in resuscitation situations, and accepts their viewpoints **
Managing the service	Contributes to actions that will allow the ED to meet all targets including infection control, patient experience and four-hour target – by personal role modelling and support of others **
Improving services	Implements changes to meet departmental aspirations including new rotas, new models of working, acquiring new skills *
Setting direction	Contributes to annual departmental strategic vision - including discussions on the role of the consultant, collaboration with primary care and working with specialities in hospital at night ***

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.

CC25 Management and NHS structure

To understand the structure of the NHS and the management of local healthcare systems in order to be able to participate fully in managing healthcare provision		
Knowledge	Assessment Methods	GMP Domains
Understand the guidance given on management and doctors by the GMC	C	1
Understand the local structure of NHS systems in your locality recognising the potential differences between the four countries of the UK	ACAT, C	1
Understand the structure and function of healthcare systems as they apply to your specialty	ACAT, C	1
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
Understand the importance of local demographic, socio-economic and health data and their use to improve system performance	C	1
Understand the principles of: <ul style="list-style-type: none"> • Clinical coding • European Working Time Regulations • National Service Frameworks • Health regulatory agencies (e.g., NICE, Scottish Government) • 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 	ACAT, C, Mi	1
Understand the principles of recruitment and appointment procedures	C	1
Skills		

Participate in managerial meetings	ACAT, C	1
<i>Take an active role in promoting the best use of healthcare resources</i>	ACAT, C, Mi	1,2
<i>Work with stakeholders to create and sustain a patient-centred service</i>	ACAT, C, Mi	1,2
Employ new technologies appropriately, including information technology	ACAT, C, Mi	1
Conduct an assessment of the community needs for specific health improvement measures	C, Mi	1
Behaviours		
Recognise the importance of just allocation of healthcare resources	C	1, 2
Recognise the role of doctors as active participants in healthcare systems	ACAT, C, Mi	1, 2
Respond appropriately to health service targets and take part in the development of services	ACAT, C, Mi	1, 2
Recognise the role of patients and carers as active participants in healthcare systems and service planning	ACAT, C, Mi, PS	1, 2, 3
Show willingness to improve managerial skills (e.g. management courses) and engage in management of the service	C, M	1
Level Descriptor		
1	<p>Describes in outline the roles of primary care, including general practice, public health, community, mental health, secondary and tertiary care services within healthcare</p> <p>Describes the roles of members of the clinical team and the relationships between those roles</p> <p>Participates fully in clinical coding arrangements and other relevant local activities</p>	
2	<p>Can describe in outline the roles of primary care, community and secondary care services within healthcare</p> <p><i>Can describe the roles of members of the clinical team and the relationships between those roles</i></p> <p>Participates fully in clinical coding arrangements and other relevant local activities</p>	

3	<p>Can describe the relationship between Government, NHS, central and local management bodies, General Practice and Trusts including relationships with local authorities and social services</p> <p>Participate in team and departmental management meetings including discussions around service development</p> <p>Discuss the most recent guidance from the relevant health regulatory agencies in relation to the specialty</p>
4	<p>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</p> <p>Participate fully in clinical directorate meetings and other appropriate local management structures in planning and delivering health care within the specialty</p> <p>Participate as appropriate in staff recruitment processes in order to deliver an effective clinical team</p> <p>Within the directorate collaborate with other stakeholders to ensure that their needs and views are considered in managing services.</p>
Emergency department context	
1	<p>Can describe the local management arrangements including naming the lead consultant, senior nurse and manager for the ED</p> <p><i>Always completes the investigations, treatments and diagnosis documentation for individual patients as well as times and referral decisions</i></p>
2	<p>Describes the relationship to primary care including any local urgent care centre, or GPs working in the department</p> <p>Uses investigations to confirm clinical diagnoses recognising the need for rational resource utilisation</p>

3	<p>Attends departmental meetings and contributes to proposals for new equipment, design of the department or other strategic actions</p> <p>Discusses documents from the RCEM Professional Standards Committee on departmental standards and the role of the consultant and applies to their own future working pattern</p>
4	<p>Participates in recruitment and selection for junior staff and nursing staff where appropriate</p> <p>Attends management course and gives summary of points learnt to other trainees</p>
Leadership	Specialty trainees should demonstrate competence in all elements of domains, with some evidence in setting direction
Demonstrating personal qualities	<p>Demonstrates willingness to get involved in management tasks</p> <p>Completes management portfolio tasks – 3 per year *</p>
Working with others	<p>Supports others in completing management tasks</p> <p>Explains and supports decisions that limit resources (where appropriate) in the ED</p> <p>Works with the CCG/Health Board to understand local demand for emergency and unscheduled care ***</p> <p>Works with mental health to ensure pathways appropriate for patients with mental health needs ***</p>
Managing the service	<p>Enquires and gains understanding of the budget and staffing rationale in the ED</p> <p>Reviews the rota for doctors at junior or senior level and matches to patient attendance numbers *</p>
Improving services	Participates in the introduction of new technology (computer system, equipment) in the ED and evaluates the impact on the service *
Setting direction	Participates in regional or national board discussions on emergency department reconfiguration and contributes to data collection or other work from EDs to support the best configuration for quality patient care in Emergency Departments ***

Clinical presentations

Patients seek medical assessment and treatment in the Emergency Department with a problem and not necessarily a diagnosis. The curriculum has therefore been arranged around defined presenting problems. These have been divided between major presentations and acute presentations. The major presentations include presentations of immediately life threatening problems and other severe and urgent conditions, as well as other less serious problems. The 'acute presentations' may also include serious causes for the presentation. Workplace Based Assessments of the major presentations should be undertaken by a Consultant

Major presentations -Core training

<u>CMP 1 Anaphylaxis</u>	115
<u>CMP2 Cardio-Respiratory Arrest</u>	116
<u>CMP3 Major Trauma</u>	118
<u>CMP4 Septic Patient</u>	120
<u>CMP5 Shocked Patient</u>	122
<u>CMP6 Unconscious Patient</u>	124

Acute presentations- Core training

<u>CAP1 Abdominal Pain including loin pain</u>	<u>125</u>
<u>CAP2 Abdominal Swelling, Mass & Constipation</u>	<u>127</u>
<u>CAP3 Acute Back Pain</u>	<u>129</u>
<u>CAP4 Aggressive/disturbed behaviour</u>	<u>130</u>
<u>CAP5 Blackout/Collapse</u>	<u>131</u>
<u>CAP6 Breathlessness</u>	<u>133</u>
<u>CAP7 Chest Pain</u>	<u>135</u>
<u>CAP8 Confusion, Acute/Delirium</u>	<u>137</u>
<u>CAP9 Cough</u>	<u>139</u>
<u>CAP10 Cyanosis</u>	<u>140</u>
<u>CAP11 Diarrhoea</u>	<u>141</u>
<u>CAP12 Dizziness and Vertigo</u>	<u>142</u>
<u>CAP13 Falls</u>	<u>143</u>
<u>CAP14 Fever</u>	<u>144</u>
<u>CAP15 Fits / Seizure</u>	<u>146</u>
<u>CAP16 Haematemesis & Melaena</u>	<u>148</u>
<u>CAP17 Headache</u>	<u>149</u>
<u>CAP18 Head Injury</u>	<u>150</u>
<u>CAP19 Jaundice</u>	<u>151</u>
<u>CAP20 Limb Pain & Swelling - Atraumatic</u>	<u>152</u>
<u>CAP21 Neck pain</u>	<u>154</u>
<u>CAP22 Oliguric patient</u>	<u>155</u>
<u>CAP23 Pain Management</u>	<u>157</u>
<u>CAP24 Painful ear</u>	<u>159</u>
<u>CAP25 Palpitations</u>	<u>160</u>
<u>CAP26 Pelvic pain</u>	<u>161</u>
<u>CAP27 Poisoning</u>	<u>162</u>
<u>CAP28 Rash</u>	<u>164</u>
<u>CAP29 Red eye</u>	<u>166</u>
<u>CAP30 Mental health</u>	<u>167</u>
<u>CAP31 Sore throat</u>	<u>168</u>
<u>CAP32 Syncope and pre-syncope</u>	<u>169</u>
<u>CAP33 Traumatic limb and joint injuries</u>	<u>170</u>
<u>CAP34 Vaginal bleeding</u>	<u>171</u>
<u>CAP35 Ventilatory Support</u>	<u>172</u>
<u>CAP36 Vomiting and Nausea</u>	<u>174</u>
<u>CAP37 Weakness and Paralysis</u>	<u>175</u>
<u>CAP38 Wound assessment and management</u>	<u>177</u>

3.3.2 ACCS Major Presentations CT1&2

CMP1 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		
Knowledge	Assessment Methods	GMP Domains
Identify physiological perturbations causing anaphylactic shock	E, C, Mi, ACAT	1
Recognise clinical manifestations of anaphylactic shock	E, C, Mi, ACAT	1
Elucidate causes of anaphylactic shock	E, C, Mi, ACAT	1
Know anaphylaxis guidelines	E, C, Mi, ACAT	1
Define follow-up pathways after acute resuscitation	E, C, Mi, ACAT	1
Skills		
Recognise clinical consequences of acute anaphylaxis	Mi, C, S	1
Perform immediate physical assessment (laryngeal oedema, bronchospasm, hypotension)	Mi, C, D, S	1
Institute resuscitation (adrenaline/epinephrine), oxygen, IV access, fluids)	Mi, C, D, S	1
Arrange monitoring of relevant indices	Mi, C, S	1
Order, interpret and act on initial investigations (tryptase, C1 esterase inhibitor etc.)	Mi, C	1
Be an ALS provider	L	1
Behaviour		
Exhibit a calm and methodical approach	ACAT, C, Mi, S	3
Adopt leadership role where appropriate	ACAT, C, Mi, S	2,4
Involve senior and specialist allergy services promptly	ACAT, C, Mi, S	2, 3

CMP2 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		
Knowledge	Assessment Methods	GMP Domains
Demonstrate knowledge of the causes of cardiac arrest including special situations, e.g. hypothermia, trauma, overdose Be able to identify and correct reversible causes. Demonstrate knowledge of the outcomes of pre-hospital and in-hospital arrest	E, C, Mi, ACAT	1
Demonstrate familiarity with the ALS and APLS algorithms and pharmacology	E, C, Mi, ACAT	1
Outline indication and safe delivery of drugs used as per ALS and APLS algorithms	E, C, Mi, ACAT	1
Know how to manage the patient post- arrest with ROSC Be able to diagnose and treat peri-arrest arrhythmias and know the indication, contraindications and side effects of the drugs used	E, C, Mi, ACAT	1
Know of tissue and organ donation	E, C, Mi, ACAT	1
Skills		
Rapidly assess the collapsed patient in terms of ABC, airway, breathing and circulation	Mi, D, L	1
Perform basic life support competently as defined by Resuscitation Council (UK): effective chest compressions, airway manoeuvres, bag and mask ventilation	Mi, D, L	1
Competently perform further steps in advanced life support: IV drugs; safe DC shocks when indicated; central line insertion, external pacing, endotracheal drug administration, identification and rectification of reversible causes of cardiac arrest	Mi, D, L	1
Break bad news appropriately (see generic curriculum)	Mi, C, M	3, 4

Behaviour		
Recognise and intervene in critical illness promptly to prevent cardiac arrest (e.g. peri-arrest arrhythmias, hypoxia)	ACAT, AA, C, Mi	1
Maintain safety of environment for patient and health workers	ACAT, C, Mi	2, 4
Hold a valid ALS certificate (MANDATORY REQUIREMENT)	ACAT, AA C, Mi	1
Demonstrate ability to work in a team and succinctly present clinical details of situation to senior doctor	ACAT, C, Mi	3
Demonstrate ability to consult with a senior, seek anaesthetic team support and to act as the patient's advocate when continued Intensive Care Medicine input is needed	ACAT, C, Mi	2, 4
Recognise importance of sensitively breaking bad news to family	ACAT, C, Mi	3, 4

CMP3 Major Trauma

To assess the trauma victim using a systematic prioritized approach, be able to resuscitate, identifying life-threatening conditions and stabilize the patient		
Knowledge	Assessment Methods	GMP Domains
Be able to perform and interpret the primary and secondary survey	E, C, Mi, ACAT, L	1
Undertake emergency airway management including how to perform a cricothyroidotomy and protect the cervical spine	E, C, Mi, ACAT, L	1
Know how to establish IV access including intra-osseous, central venous access and arterial pressure monitoring	E, C, Mi, ACAT, L	1
Be able to identify life-threatening injury especially thoracic and abdominal trauma and know how to undertake needle thoracocentesis and intercostal drain insertion To identify those with aortic injury, diaphragmatic rupture and pulmonary contusion, myocardial contusion, oesophageal rupture, tracheo-bronchial injury, rib and sternal fracture	E, C, Mi, ACAT, L	1
Be able to recognise and manage hypovolaemic shock	E, C, Mi, ACAT, L	1
Understand the uses of peritoneal lavage and FAST scanning	E, C, Mi, ACAT, L	1
Know the principles of management of head injury and the mechanism and effects of raised intracranial pressure, and methods of preventing secondary brain injury	E, C, Mi, ACAT, L	1
Know the principles of anaesthesia in the presence of head injury and major trauma	E, C, Mi, ACAT, L	1
Know the initial management of cervical spine injury	E, C, Mi, ACAT, L	1

Skills		
Be able to assess and immediately manage a trauma patient: perform and interpret primary and secondary survey	Mi, C, S, D, L	1
Provide emergency airway management oxygen therapy and ventilation	Mi, C, S, D, L	1
Be part of the airway team undertaking rapid sequence induction of the injured patient.	Mi, C, S, D, L	1
Be able to provide cervical spine immobilization and log rolling.	Mi, C, S, D, L	1
Assess and manage hypovolaemic shock. Be able to cannulate major vessel for resuscitation and monitoring.	Mi, C, S, D, L	1
Undertake needle thoracocentesis and intercostal drain insertion. Be able to identify and treat tension pneumothorax	Mi, C, S, D, L	1
Be able to assess the patient using the Glasgow Coma Score	Mi, C, S, D, L	1
Undertake initial appropriate investigations e.g. x-match chest x-ray, and be able to interpret them	Mi, C, S, L	1
To provide pain relief for the trauma victim	Mi, C, S, L	1
Be able to undertake safe urinary catheterisation and NG tube insertion	Mi, C, S, D, L	1
Behaviour		
Prompt attendance; focus on resuscitation and life-threatening conditions, good communication and team work	ACAT, C, Mi, L	2, 3
Exhibit a calm methodical approach and be able to prioritise care	ACAT, C, Mi, L	3
Adopt leadership role where appropriate and be able to take over when appropriate	ACAT, C, Mi, L	2,4
Involve senior and specialist services early for those patients with life-or-limb threatening injuries	ACAT, C, Mi, L	2, 3

CMP4 Septic Patient

The trainee will have full competence in the assessment and resuscitation of the patient presenting with severe sepsis or septic shock		
Knowledge	Assessment Methods	GMP Domains
Demonstrate knowledge of the definitions of the systemic inflammatory response syndrome (SIRS), severe sepsis and septic shock Knowledge of the outcomes of SIRS, septic shock and multiple organ failure	E, C, Mi, ACAT	1
Knowledge of common gram negative and gram positive organisms producing sepsis. Knowledge of special situations not limited to but including infection with: Toxin producing bacteria Invasive Group A Streptococcus Fungal organisms	C, ACAT	1
List components of current "care bundles" (e.g. The Surviving Sepsis Campaign 6 hour bundle)	E, C, Mi, ACAT	1
Outline indication and safe delivery of fluids and vasoactive drugs to haemodynamic endpoints Understanding of Early Goal Directed Therapy	E, C, Mi, ACAT	1
Demonstrate knowledge of first line empiric antibiotic therapy for common sepsis presentations. Understanding of the hospital antimicrobial formulary.	E, C, Mi, ACAT	1
Knowledge of the pharmacology and rationale for the use of: Vasoactive drugs used in sepsis Adjunctive drugs used in sepsis	E, C, Mi, ACAT	1
Knowledge of ventilatory strategies used in septic shock including lung protective ventilation	E, C, Mi, ACAT, AA	1
Understanding of the use of renal replacement therapies in sepsis and septic shock	E, C, Mi, ACAT	1
Skills		
Rapidly assesses the shocked patient in terms of ABC, airway, breathing and circulation	Mi, C, S, D, L	1

Administers oxygen, establishes intravenous access, takes blood cultures and administers antibiotics and intravenous fluids in accordance with 6 hour sepsis bundle	Mi, C, S, D, L	1
Competently performs further steps in resuscitation: arterial and central line insertion: drug assisted endotracheal intubation and safe selection of initial ventilator settings	Mi, C, S, D, L	1
Organises and interprets initial investigations: <ul style="list-style-type: none"> ▪ Arterial blood gases ▪ Lactate ▪ Central venous oxygen saturation Organises microbiological investigations not limited to but including relevant cultures, blood cultures and urinary antigens	E, Mi, C, S, D, L	1
Break bad news appropriately (see common competences curriculum)	Mi, C, S, L	3
Behaviour		
Recognise and intervene in critical illness promptly to prevent deterioration and the development of multiple organ failure	ACAT, C, Mi	1
Maintain safety of environment for patient and health workers	ACAT, C, Mi	2
Demonstrate ability to work in a team and succinctly present clinical details of situation to senior doctor	ACAT, C, Mi	3
Demonstrate ability to consult with a senior, seek anaesthetic team support in airway management and liaise with parent team and with microbiologists	ACAT, C, Mi	2
Recognise importance of sensitively breaking bad news to family	ACAT, C, Mi	3

CMP5 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		
Knowledge	Assessment Methods	GMP Domains
Identify physiological perturbations that define shock and understand the patho-physiology of its cause	E, C, Mi, ACAT	1
Identify principal categories of shock	E, C, Mi, ACAT	1
Elucidate main causes of shock in each category (e.g. MI, heart failure, PE, blood loss, sepsis)	E, C, Mi, ACAT	1
Demonstrate knowledge of sepsis syndromes	E, C, Mi, ACAT	1
Demonstrate a knowledge of the roles and the different types of monitoring required for the shocked patient	E, C, Mi, ACAT	1
Understand the role of imaging in the diagnosis of shock e.g. FAST scan, CT etc and be able to interpret the fundamentals of this imaging	E, C, Mi, ACAT	1
Demonstrate a knowledge of the different fluids and drugs e.g. inotropes used in the treatment of shock	E, C, Mi, ACAT	1
Skills		
Recognise significance of major physiological perturbations	Mi, D, L	1
Perform immediate (physical) assessment (A,B,C)	Mi, D, L	1
Institute immediate, simple resuscitation (oxygen, iv access, fluid resuscitation)	Mi, D, L	1
Arrange simple monitoring of relevant indices (oximetry, arterial gas analysis) and vital signs (BP, pulse & respiratory rate, temp, urine output)	Mi, D, L	1
To be able to gain vascular access in the shocked patient, including central venous (using ultrasound), arterial line, intra-osseous and cut down techniques	Mi, D, L	1
Order, interpret and act on initial investigations appropriately: ECG, blood cultures, blood count, electrolytes, CVP measurements	Mi, D, L	1
Recognition of the need for urgent surgical intervention	Mi, D, L	1

Behaviour		
Exhibit calm and methodical approach to assessing the critically ill patient	ACAT, C, Mi	3
Adopt leadership role where appropriate	ACAT, C, Mi, M	2,3
Involve senior and specialist (e.g. Intensive Care Medicine outreach) services promptly	ACAT, C, Mi	2

CMP6 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		
Knowledge	Assessment Methods	GMP Domains
Identify the principal causes of unconsciousness (metabolic, neurological)	E, C, Mi, ACAT	1
Recognise the principal sub-causes (drugs, hypoglycaemia, hypoxia; trauma, infection, vascular, epilepsy, raised intra-cranial pressure, reduced cerebral blood flow, endocrine)	E, C, Mi, ACAT	1
List appropriate investigations for each	E, C, Mi, ACAT	1
Outline immediate management options	E, C, Mi, ACAT	1
Skills		
Make a rapid and immediate assessment including examination of coverings of nervous system (head, neck, spine) and Glasgow Coma Score	Mi, D	1
Initiate appropriate immediate management (A,B,C, cervical collar, administer glucose)	Mi, C	1
Take simple history from witnesses when patient has stabilised	Mi, C	1
Prioritise, order, interpret and act on simple investigations appropriately	Mi, C	1
Initiate early (critical) management (e.g. control fits, manage poisoning) including requesting safe monitoring	Mi, C	1
Behaviour		
Recognise need for immediate assessment and resuscitation	ACAT, C, Mi	1
Assume leadership role where appropriate	ACAT, C, Mi	2,3
Involve appropriate specialists to facilitate immediate assessment and management (e.g. imaging, intensive care, neurosurgeons)	ACAT, C, Mi	3

3.3.3 ACCS Acute Presentations CT1&2

CAP1 Abdominal Pain including loin pain

The trainee will be able to assess a patient presenting with abdominal pain and loin pain to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
To outline the different classes of abdominal pain and how the history and clinical findings differ between the causes	E, C, Mi, ACAT	1
To identify the possible surgical causes of abdominal pain, depending on site, details of history, acute or chronic including but not limited to peptic ulcer disease, pancreatitis, cholecystitis, cholangitis, biliary colic, bowel obstruction, diverticular disease, viscus perforation, acute appendicitis and ischaemic colitis, AAA, hernias, renal calculi, pyelonephritis, chronic inflammatory bowel disease, and volvulus	E, C, Mi, ACAT	1
Know the common and serious causes of loin pain including renal colic, infection and obstruction of the urinary tract, abdominal aortic aneurysm	E, C, Mi, ACAT	1
Know the medical causes of abdominal pain	E, C, Mi, ACAT	1
To define the situations in which urgent surgical, urological or gynaecological opinion should be sought	E, C, Mi, ACAT	1
Determine which first-line investigations are required, depending on the likely diagnoses following evaluation using ECG, plain radiology, CT, ultrasound and blood tests.	E, C, Mi, ACAT	1
Define the indications and contraindications for specialist investigation: ultrasound, CT, CT KUB, MRI, endoscopy, and IVU	E, C, Mi, ACAT	1

Skills		
To have an A, B, C, D approach ensuring identification of critical or life-threatening illness	Mi, C, D	1
Elicit signs of tenderness, guarding, and rebound tenderness and interpret appropriately	Mi, C, D	1
Order, interpret and act on initial investigations appropriately: blood tests, x-rays, ECG and microbiology investigations	Mi, C	1
Initiate first-line management: including effective fluid resuscitation, pain relief, antibiotics and appropriate use of a nasogastric tube	Mi, C	1
Interpret gross pathology on CT, CT KUB, IVU, including liver metastases and obstructed ureters with hydronephrosis	Mi, C	1
Be able to identify those that require admission and those who may be safely discharged	Mi, C	1
Behaviour		
In conjunction with senior and appropriate specialists, exhibit timely intervention when abdominal pain is the manifestation of critical illness or is life-threatening,	ACAT, C, Mi	1
Recognise the importance of a multi-disciplinary approach including early surgical/urological assessment when appropriate	ACAT, C, Mi, M	2, 3
Display sympathy to physical and mental responses to pain	ACAT, C, Mi, M	3, 4
Involve other specialties promptly when required	ACAT, C, Mi	2, 3

CAP2 Abdominal Swelling, Mass & Constipation

The trainee will be able to undertake assessment of a patient presenting with abdominal swelling, mass or constipation to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Define the different types of abdominal mass in terms of site, aetiology and clinical characteristics	E, C, Mi, ACAT	1
Recall the preponderance of functional causes of constipation including constipation with overflow and the investigation and management of faecal incontinence	E, C, Mi, ACAT	1
Describe the appropriate investigations-radiologic, surgical, endoscopy	E, C, Mi, ACAT	1
Identify the causes of hepatomegaly and splenomegaly, abdominal swelling and constipation	E, C, Mi, ACAT	1
Recall abdominal wall pathology as possible causes of distension, including divarification of the recti	E, C, Mi, ACAT	1
Know the pathophysiology of portal hypertension and bowel obstruction	E, C, Mi, ACAT	1
Know the important steps in diagnosing the cause of ascites, including imaging and the diagnosis of spontaneous bacterial peritonitis and malignancy	E, C, Mi, ACAT	1
Skills		
Elicit associated symptoms and risk factors for the presence of diseases presenting with abdominal mass, ascites and co-existing signs. Elicit and interpret important physical findings to establish likely nature	Mi, C, D	1
Order and interpret appropriate diagnostic tests	Mi, C	1
Practise safe management of ascites: including the use of diuretics, fluid and salt restriction, and ascitic tap	Mi, C, D	1
Select appropriate second-line investigations of constipation when indicated: including blood tests imaging and endoscopy	Mi, C	2

Following diagnosis of the cause of constipation prescribe bulk or osmotic laxatives or motility stimulants as necessary	Mi, C	1
Provide review of medications in patients with constipation in the context of multi-system disease	Mi, C	1
Behaviour		
Involve specialists promptly when appropriate: surgery, gastroenterology, radiology, palliative care	ACAT, C, Mi	3
Discuss with patient likely outcomes and prognosis of condition	ACAT, C, Mi	3, 4

CAP3 Acute Back Pain

The trainee will be able to assess a patient with a new presentation of back pain to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
<p>Know the causes of acute back pain including but not limited to – malignant, septic, musculoskeletal, urological, neurological, AAA</p> <p>Be able to outline features that raise concerns as to a sinister cause (red flags) and those that lead to a consideration of chronic causes (yellow flags)</p> <p>Understand and recognise the cauda equina syndrome</p>	E, C, Mi, ACAT	1
Specify abdominal pathology that may present with back pain	E, C, Mi, ACAT	1
Recall the indications of an urgent MRI of spine	E, C, Mi, ACAT	1
Outline indications for hospital admission	E, C, Mi, ACAT	1
Outline secondary prevention measures in osteoporosis	E, C, Mi, ACAT	1
Skills		
Perform examination and elicit signs of spinal cord/cauda equina compromise	Mi, C, D	1
Practise safe prescribing of analgesics/anxiolytics to provide symptomatic relief	Mi, C	1
Order, interpret and act on initial investigations appropriately: blood tests and x-rays	Mi, C	1
Behaviour		
Involve neurosurgical unit promptly in event of neurological symptoms or signs	ACAT, C, Mi	2
Ask for senior help when critical abdominal pathology is suspected	ACAT, C, Mi	2, 3
Recognise the socio-economic impact of chronic lower back pain	ACAT, C, Mi	2, 3
Participate in multi-disciplinary approach: physio, OT	C, M	3, 4
Recognise impact of osteoporosis and encourage bone protection in all patients at risk	C	1

CAP4 Aggressive/disturbed behaviour

The trainee will be competent in predicting and preventing aggressive and disturbed behaviour, use safe physical restraint and chemical sedation, investigate appropriately and liaise with the mental health team.		
Knowledge	Assessment Methods	GMP Domains
Know the factors that predict aggressive behaviour: personal history, alcohol and substance abuse, delirium	E, C, Mi, ACAT	1
Define and characterize psychosis and know the common causes	E, C, Mi, ACAT	1
Know the indications, contraindications and side effects of tranquillisers Know de-escalation techniques that can be used to prevent violent behaviour	E, C, Mi, ACAT	1
Know the legal framework for authorizing interventions in the management of the disturbed or violent patient	E, C, Mi, ACAT	1
Skills		
Ensure appropriate environment and support staff	C	1
Assess fully including mental state examination and produce valid differential diagnosis	Mi, C, D	1
Undertake and interpret appropriate investigations	C	1
Produce safe rapid tranquillisation if indicated as defined in national guidelines with appropriate monitoring	Mi, C	1
Behaviour		
Treat acutely disturbed patient with respect and dignity	ACAT, M	2, 4
Liaise promptly with psychiatric services	ACAT, M	3

CAP5 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')		
Knowledge	Assessment Methods	GMP Domains
Recall the causes for blackout and collapse (including syncopal causes vaso-vagal, cough, effort, micturition, carotid sinus hypersensitivity).	E, C, Mi, ACAT	1
Differentiate the causes depending on the situation of blackout +/- or collapse, associated symptoms and signs, and eye-witness reports	E, C, Mi, ACAT	1
Outline the indications for temporary and permanent pacing systems	E, C, Mi, ACAT	1
Define indications for investigations: ECHO, ambulatory ECG monitoring, neuro-imaging	E, C, Mi, ACAT	1
Skills		
Elucidate history to establish whether event was LOC, fall without LOC, vertigo (with eye-witness account if possible)	Mi, C	1
Assess patient in terms of ABC and level of consciousness and manage appropriately	Mi, C, D	1
Perform examination to elicit signs of cardiovascular or neurological disease and to distinguish epileptic disorder from other causes	Mi, C, D	1
Order, interpret and act on initial investigations appropriately: ECG, blood tests inc. glucose, brain imaging (CT and MRI)	Mi, C	1
Manage arrhythmias appropriately as per ALS guidelines	C, L	1
Detect orthostatic hypotension	Mi, C, D	1
Institute external pacing systems when appropriate	Mi, C, D, L	1

Behaviour		
Ensure the follow-up pathways for these patients e.g. syncope clinics, falls clinics	ACAT, C	2,3
Recognise impact episodes can have on lifestyle particularly in the elderly	ACAT, C	2, 3
Recognise recommendations regarding fitness to drive in relation to undiagnosed blackouts	ACAT, C	2, 3

CAP6 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		
Knowledge	Assessment Methods	GMP Domains
Recall the common and/or important cardio-respiratory conditions that present with breathlessness	E, C, Mi, ACAT	1
Differentiate orthopnoea and paroxysmal nocturnal dyspnoea	E, C, Mi, ACAT	1
Identify non-cardio-respiratory factors that can contribute to or present with breathlessness e.g. acidosis	E, C, Mi, ACAT	1
Define basic patho-physiology of breathlessness	E, C, Mi, ACAT	1
List the causes of wheeze and stridor	E, C, Mi, ACAT	1
Demonstrate knowledge of the indications, contraindications and adverse effects of the drugs used to treat the causes of breathlessness	E, C	1
Outline indications for CT chest, CT pulmonary angiography, spirometry	E, C, Mi, ACAT	1
Skills		
Interpret history and clinical signs to list appropriate differential diagnoses: including but not limited to pneumonia, COPD, PE, pulmonary oedema, pneumothorax, asthma. Know the relevant BTS guidelines for these conditions	Mi, C, L	1
Differentiate between stridor and wheeze	Mi, C	1
Order, interpret and act on initial investigations appropriately: routine blood tests, oxygen saturation, arterial blood gases, chest x-rays, ECG, peak flow, spirometry	Mi, C	1
Initiate treatment in relation to diagnosis, including safe oxygen therapy, early antibiotics for pneumonia	Mi, C	1
Perform pleural aspiration and chest drain insertion	D, L	1

Recognise disproportionate dyspnoea and hyperventilation	Mi, C	1
Practice appropriate management of wheeze and stridor	Mi, C	1
Evaluate and advise on good inhaler technique	Mi, C, D	1
Recognise indications & contraindications for non-invasive ventilation (NIV), and the indications and contraindications for intubation and invasive ventilatory support	Mi, C	1
Behaviour		
Exhibit timely assessment and treatment in the acute phase	ACAT, C	1
Recognise the distress caused by breathlessness and discuss with patient and carers	ACAT, C	2, 3
Recognise the impact of long term illness	ACAT, C	2
Consult senior when respiratory distress is evident	ACAT, C	2, 3
Involve Intensive Care Medicine team promptly when indicated and recognise the need for care in an appropriate environment	ACAT, C	2
Exhibit non-judgemental attitudes to patients with a smoking history	ACAT, C, M	3, 4

CAP7 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		
Knowledge	Assessment Methods	GMP Domains
Characterise the different types of chest pain, and outline other symptoms that may be present	E, C, Mi, ACAT	1
List and distinguish between the common causes for each category of chest pain and associated features: cardio-respiratory, musculoskeletal, upper GI	E, C, Mi, ACAT	1
Define the pathophysiology of acute coronary syndrome and pulmonary embolus	E, C, Mi, ACAT	1
Identify the indications for PPCI and thrombolysis in ACS	E, C, Mi, ACAT	1
Identify the indications and limitations of cardiac biomarkers, d-dimer analysis, CTPA and V/Q scanning	E, C, Mi, ACAT	1
Know emergency treatments for PE, ACS and aortic dissection	E, C, Mi, ACAT	1
Outline the indications for further investigation in chest pain syndromes: CTPA, trans-oesophageal echocardiography and tread mill (stress) testing	E, C, Mi, ACAT	1
Skills		
Interpret history and clinical signs to list appropriate differential diagnoses: especially for cardiac pain & pleuritic pain	Mi, C	1
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	Mi, C	1
Commence initial emergency treatment including that for coronary syndromes, pulmonary embolus and aortic dissection	Mi, C, D	1
Elect appropriate arena of care and degree of monitoring	Mi, C	2
Formulate initial discharge plan	ACAT, C, AA	1
Behaviour		

Perform timely assessment and treatment of patients presenting with chest pain	ACAT, C	1
Involve senior when chest pain heralds critical illness or when cause of chest pain is unclear	ACAT, C	3
Recognise the contribution and expertise of specialist cardiology nurses and technicians	ACAT, C	3
Recommend appropriate secondary prevention treatments and lifestyle changes on discharge	ACAT, C	2, 3
Communicate in a timely and thoughtful way with patients and relatives	ACAT, C, M	3, 4

CAP8 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		
Knowledge	Assessment Methods	GMP Domains
List the common and serious causes for acute confusion/delirium	E, C, Mi, ACAT	1
Outline important initial investigations, including electrolytes, cultures, full blood count, ECG, blood gases, thyroid function tests	E, C, Mi, ACAT	1
Recognise the factors that can exacerbate acute confusion/delirium e.g. change in environment, infection	E, C, Mi, ACAT	1
List the pre-existing factors that pre-dispose to acute confusion/delirium	E, C, Mi, ACAT	1
Outline indications for further investigation including head CT, lumbar puncture Describe the indications, contraindications and side effects of drugs used in acute psychosis including, but not limited to: haloperidol, benzodiazepines, clonidine	E, C, Mi, ACAT	1
Skills		
Examine to elicit cause of acute confusion/delirium	Mi, D	1
Perform mental state examinations (abbreviated mental test and mini-mental test and Confusional Assessment Method for ICU (CAM-ICU)) to assess severity and progress of cognitive impairment	Mi, C, D	1
Recognise pre-disposing factors: cognitive impairment, psychiatric disease	C	1
Understand and act on the results of initial investigations e.g. CT head, LP	E, C	1
Interpret and recognise pathology evident on CT head/MRI Brain	E, C	1

Behaviour		
Recognise that the cause of acute confusion/delirium is often multi-factorial	ACAT, C	2, 3
Contributes to multidisciplinary team management including appropriate use of local physical restraint policy	ACAT, C, M	3, 4
Recognise the effects of acutely confused/delirious patient on other patients and staff in the ward environment	ACAT, C	2, 3

CAP9 Cough

The trainee will be able to assess a patient presenting with cough to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
List the common and serious causes of cough	E, C, Mi, ACAT	1
Identify risk factors relevant to each aetiology including precipitating drugs	E, C, Mi, ACAT	1
Outline the different classes of cough and how the history and clinical findings differ between them	E, C, Mi, ACAT	1
State which first line investigations are required, depending on the likely diagnoses following evaluation	E, C, Mi, ACAT	1
Skills		
Order, interpret and act on initial investigations appropriately: blood tests, chest x-ray and PFTs	E, C	1
Awareness of management for common causes of cough	E, C	1
Behaviour		
Contribute to patient's understanding of their illness	ACAT, C	3, 4
Exhibit non-judgmental attitudes to patients with a history of smoking	ACAT, C, M	3, 4
Consult seniors promptly when indicated	ACAT, C	2, 3
Recognise the importance of a multi-disciplinary approach	ACAT, C, M	2

CAP10 Cyanosis

The trainee will be able to assess a patient presenting with cyanosis to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the causes of cyanosis, cardiac & respiratory	E, C, Mi, ACAT	1
Know how to formulate a differential diagnosis and be able to differentiate from methaemoglobinaemia	E, C, Mi, ACAT	1
Skills		
Perform a full clinical examination differentiating between the various causes of cyanosis	E, C, D	1
Be able to perform and interpret the appropriate tests, e.g. x-rays and ECG	E, C, D	1
Understand the safe prescribing of oxygen therapy	E, C	1
Behaviour		
Involve senior promptly in event of significant airway compromise	ACAT, C	2
Involve specialist team as appropriate	ACAT, C	2

CAP11 Diarrhoea

The trainee will be able to assess a patient presenting with diarrhoea to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Specify the causes of diarrhoea	E, C, Mi, ACAT	1
Correlate presentation with other symptoms: such as abdominal pain, rectal bleeding, weight loss	E, C, Mi, ACAT	1
Recall the pathophysiology of diarrhoea for each aetiology	E, C, Mi, ACAT	1
Describe the investigations necessary to arrive at a diagnosis	E, C, Mi, ACAT	1
Identify the indications for urgent surgical review in patients presenting with diarrhoea	E, C, Mi, ACAT	1
Recall the presentation, investigations, prevention and treatment of C. difficile-associated diarrhoea	E, C, Mi, ACAT	1
Demonstrate knowledge of infection control procedures Demonstrate knowledge of bowel management systems	E, C, Mi, ACAT	1
Skills		
Evaluate nutritional and hydration status of the patient	Mi, C	1
Assess whether patient requires hospital admission	Mi, C	1
Perform rectal examination as part of physical examination	Mi, C, D	1
Initiate and interpret investigations: blood tests, stool examination, endoscopy and radiology as appropriate (AXR and CT – intestinal obstruction, toxic dilatation)	E, C, D	1
Behaviour		
Seek a surgical and senior opinion when required	ACAT, C	3
Exhibit sympathy and empathy when considering the distress associated with diarrhoea and incontinence	ACAT, C	3, 4

CAP12 Dizziness and Vertigo

The trainee will be able to evaluate the patient who presents with dizziness or vertigo to produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the neuro-anatomy and physiology relevant to balance, coordination and movement	E, C, Mi, ACAT	1
Define and differentiate the different types of vertigo and ataxia and their causes	E, C, Mi, ACAT	1
Skills		
Take history from patient and attempt to define complaint as either pre-syncope, dizziness or vertigo	Mi, C, D	1
Perform full physical examination to elicit signs of neurological, inner ear or cardiovascular disease including orthostatic hypotension	Mi, C, D	1
Recognise when to request additional tests such as CT scan	E, C	1
Know when to use drugs for dizziness and vertigo and understand their limitations and side effects	E, C	1
Behaviour		
Recognise patient distress when presenting with dizziness and vertigo	ACAT, C	2
Know when to refer to specialist services such as ENT	ACAT, C	3

CAP13 Falls

The trainee will be able to assess a patient presenting with a fall and produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan (see also 'Syncope' and 'Blackout/Collapse')		
Knowledge	Assessment Methods	GMP Domains
Recall causes of falls and risk factors for falls	E, C, Mi, ACAT	1
Outline a comprehensive assessment of a patient following a fall and give a differential diagnosis	E, C, Mi, ACAT	1
Recall the relationship between falls risk and fractures	E, C, Mi, ACAT	1
Recall consequences of falls, such as loss of confidence, infection	E, C, Mi, ACAT	1
State how to distinguish between syncope and fall	E, C, Mi, ACAT	1
Skills		
Define the adverse features of a fall, which investigations are needed, and identify those who need admission and those who can be safely discharged with follow-up in a falls clinic	E, Mi, C	1
Demonstrates awareness of implications of falls and secondary complications of falls, including rhabdomyolysis following a 'long lie'.	Mi, C	1
Commence appropriate treatment including pain relief	Mi, C	1
Behaviour		
Recognise the psychological impact to an older person and their carer after a fall	ACAT, C	2, 3
Contribute to the patient's understanding as to the reason for their fall	ACAT, C, PS	2, 3
Discuss with seniors promptly and appropriately	ACAT, C	2, 3
Ensure appropriate referral to a falls clinic	ACAT, C, AA	2,3
Relate the possible reasons for the fall and the management plan to patient and carers	ACAT, C, PS	3, 4

CAP14 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		
Knowledge	Assessment Methods	GMP Domains
Recall the pathophysiology of developing a fever and relevant use of anti-pyretics	E, C, Mi, ACAT	1
Recall the underlying causes of fever: infection, malignancy, inflammation	E, C, Mi, ACAT	1
Recall guidelines with regard to antibiotic prophylaxis	E, C, Mi, ACAT	1
Differentiate features of viral and bacterial infection	E, C, Mi, ACAT	1
Outline indications and contraindications for LP in context of fever	E, C, Mi, ACAT	1
Recognition and awareness of management of neutropenic sepsis	E, C, Mi, ACAT	1
Skills		
Recognise the presence of sepsis syndrome in a patient, commence resuscitation and liaise with senior colleagues promptly	E, Mi, C, D, S	1
Order, interpret and act on initial investigations appropriately: blood tests, cultures, CXR	Mi, C	1
Be able to perform a lumbar puncture and interpret the result of CSF analysis	D	1
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, implanted medical devices/prostheses	E, Mi, C	1
Commence empirical antibiotics when an infective source of fever is deemed likely in accordance with local prescribing policy	E, Mi, C	1
Commence anti-pyretics as indicated	Mi, C	1
Behaviour		
Adhere to local antibiotic prescribing policies	ACAT, C, AA	2

Highlight the importance of early cultures and prompt administration of antibiotics.	ACAT, C, AA	2
Highlight importance of nosocomial infection and principles for infection control	ACAT, C	2
Consult senior in event of septic syndrome	ACAT, C	2, 3
Discuss with senior colleagues and follow local guidelines in the management of the immunosuppressed e.g. HIV, neutropenia	ACAT, C	2, 3
Promote communicable disease prevention: e.g. immunisations, anti-malarials, safe sexual practices	ACAT, C	3, 4

CAP15 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		
Knowledge	Assessment Methods	GMP Domains
Recall the causes for seizure	E, C, Mi, ACAT	1
Recall the common epileptic syndromes	E, C, Mi, ACAT	1
Recall the essential initial investigations following a 'first fit'	E, C, Mi, ACAT	1
Recall the indications for a CT head	E, C, Mi, ACAT	1
Know an algorithm for the management of status epilepticus including the indications for general anaesthesia and airway protection.	E, C, Mi, ACAT	1
Describe the indications, contraindications and side effects of the commonly used anti-convulsants	E, C, Mi, ACAT	1
Be able to differentiate seizure from pseudo-seizures and other causes of collapse	E, C, Mi, ACAT	1
Skills		
Outline immediate management options in the management of the patient presenting in status epilepticus, including but not limited to: <ul style="list-style-type: none"> • Resuscitation and treatment • Further investigations • Transfer to an appropriate area of the hospital 	Mi, C	1
Obtain collateral history from witness	Mi, C	3
Promptly recognise and treat precipitating causes: metabolic, infective, malignancy, traumatic	Mi, C	4
Be able to differentiate seizure from other causes of collapse using history and examination	Mi, C	1

Behaviour		
Recognise the need for urgent referral in case of the uncontrolled recurrent loss of consciousness or seizures	ACAT, C	1
Recognise the principles of safe discharge, after discussion with senior colleague	ACAT, C	1, 2
Recognise importance of Epilepsy Nurse Specialists	ACAT, C	1, 2
Recognise the psychological and social consequences of epilepsy	ACAT, C	1

CAP16 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		
Knowledge	Assessment Methods	GMP Domains
Specify the causes of upper GI bleeding, with associated risk factors including but not limited to coagulopathy and use of NSAIDs/ASA/anticoagulants	E, C, Mi, ACAT	1
Recall scoring systems used to assess the significance and prognosis of an upper GI bleed	E, C, Mi, ACAT	1
Recall the principles of choice of IV access including central line insertion, fluid choice and speed of fluid administration	E, C, Mi, ACAT	1
Recall common important measures to be carried out after endoscopy, including helicobacter eradication, acid suppression	E, C, Mi, ACAT	1
Skills		
Recognise shock or impending shock and resuscitate rapidly and assess need for higher level of care	Mi, C	1
Distinguish between upper and lower GI bleeding	Mi, C	1
Demonstrate ability to secure appropriate venous access	D	1
Safely prescribe drugs indicated in event of an established upper GI bleed using the current evidence base	Mi, C	2
Behaviour		
Seek senior help and endoscopy or surgical input in event of significant GI bleed	ACAT, Mi	3
Observe safe practices in the prescription of blood products	ACAT, Mi	2

CAP17 Headache

The trainee will be able to assess a patient presenting with headache to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the presentation of the common and life-threatening causes of new onset headache	E, C, Mi, ACAT	1
Understand the pathophysiology of headache	E, C, Mi, ACAT	1
Recall the indications for urgent CT/MRI scanning in the context of headache	E, C, Mi, ACAT	1
Recall clinical features of raised intra-cranial pressure	E, C, Mi, ACAT	1
Demonstrate knowledge of different treatments for suspected migraine	E, C, Mi, ACAT	1
Skills		
Recognise important diagnostic features in history	E, Mi, C	1
Perform a comprehensive neurological examination, including eliciting signs of papilloedema, temporal arteritis, meningism and head trauma	E, D	1
Order, interpret and act on initial investigations	Mi, C	2
Perform a successful lumbar puncture when indicated with minimal discomfort to patient observing full aseptic technique	D	1
Interpret basic CSF analysis: cell count, protein, bilirubin, gram stain and glucose	E, Mi, C	2
Initiate prompt treatment when indicated: appropriate analgesia, antibiotics, antivirals, corticosteroids	Mi, C	1
Behaviour		
Recognise the nature of headaches that may have a sinister cause and assess and treat urgently	ACAT, C	1
Liaise with senior doctor promptly when sinister cause is suspected	ACAT, C	3
Involve neurosurgical team promptly when appropriate	ACAT, C	2, 3

CAP18 Head Injury

The trainee will be able to evaluate the patient who presents with a traumatic head injury, stabilize, assess, appropriate investigate and implement a management plan.		
Knowledge	Assessment Methods	GMP Domains
Know the anatomy of the scalp, skull and brain, the pathophysiology of head injury (primary and secondary brain injury) and the symptoms and signs	E, C, Mi, ACAT	1
Know the indications for urgent CT scanning (national guidelines for CT imaging in head injury). Know the CT appearances of the common head injuries	E, C, Mi, ACAT	1
Know the indications for admission following head injury	E, C, Mi, ACAT	1
Know which patients can be safely discharged	E, C, Mi, ACAT	1
Skills		
Be able to use the ABC approach to the management of a head injury patient, with cervical spine immobilisation	E, D	1
Be able to demonstrate to use of the GCS and ability to identify those who will need intubation and ventilation	E, MI, ACAT	1
Elicit the important facts from the history and undertake a full neurological exam to elicit signs of head injury and neurological deficit	E, Mi, C	1
Recognise and initially manage the secondary consequences of head injury (e.g. loss of airway patency, seizures, raised ICP)	Mi, S, D	1
Behaviour		
Know when to seek senior and anaesthetic, neurosurgical support	ACAT, C	2
Optimise team working between Intensive Care Medicine, neurosurgery, emergency and acute medicine	ACAT, C	2

CAP19 Jaundice

The trainee will be able to assess a patient presenting with jaundice to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Recall the pathophysiology of jaundice in terms of pre-hepatic, hepatic, and post-hepatic causes	E, C, Mi, ACAT	1
Recall causes for each category of jaundice with associated risk factors	E, C, Mi, ACAT	1
Recall issues of prescribing in patients with significant liver disease	E, C, Mi, ACAT	1
Recall basic investigations to establish aetiology	E, C, Mi, ACAT	1
Demonstrate knowledge of common treatments of jaundice	E, C, Mi, ACAT	1
Skills		
Take a thorough history and examination to arrive at a valid differential diagnosis	E, Mi, C	1
Recognise the presence of chronic liver disease or fulminant liver failure	Mi, C	1
Interpret results of basic investigations to establish aetiology	E, Mi, C	1
Recognise complications of jaundice	E, Mi, C	
Recognise and initially manage complicating factors: coagulopathy, sepsis, GI bleed, alcohol withdrawal, electrolyte disturbance	E, C	1
Behaviour		
Exhibit non-judgmental attitudes to patients with a history of alcoholism or substance abuse	ACAT, C, M	4
Consult seniors and gastroenterologists promptly when indicated	ACAT, C	3
Contribute to the patient's understanding of their illness	ACAT, PS	4
Recognise the importance of multi-disciplinary approach	ACAT, C, M	3

CAP20 Limb Pain & Swelling - Atraumatic

The trainee will be able to assess a patient presenting with atraumatic limb pain or swelling to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Recall the causes of unilateral and bilateral limb swelling in terms of acute and chronic presentation	E, C, Mi, ACAT	1
Recall the different causes of limb pain. Recall the pathophysiology for pitting oedema, non-pitting oedema, thrombosis and peripheral ischaemia	E, C, Mi, ACAT	1
Recall the risk factors for the development of thrombosis and recognised risk scoring systems	E, C, Mi, ACAT	1
Recall the indications, contraindications and side effects of diuretics and anti-coagulants	E, C, Mi, ACAT	1
Demonstrate awareness of the longer term management of DVT	E, C, Mi, ACAT	1
Differentiate the features of limb pain and/or swelling pain due to cellulitis, varicose eczema, critical ischaemia and DVT	E, C, Mi, ACAT	1
Skills		
Perform a full and relevant examination including assessment of viability and perfusion of limb and differentiate pitting oedema; cellulitis; venous thrombosis; compartment syndrome	E, D	1
Recognise compartment syndrome and critical ischaemia and take appropriate timely action	E, Mi, C	2
Order, interpret and act on initial investigations appropriately: blood tests, Doppler studies, urine protein	E, Mi, C	2
Practise safe prescribing of initial treatment as appropriate (anti-coagulation therapy, antibiotics etc)	Mi, C	2
Prescribe appropriate analgesia	MI, C, AA	2

Behaviour		
Liaise promptly with surgical colleagues in event of circulatory compromise (e.g. compartment syndrome)	ACAT, C	3
Recognise importance of thromboprophylaxis in high risk groups	ACAT, C, AA	2

CAP21 Neck pain

The trainee will be able to evaluate the patient who presents with neck pain, produce a valid differential diagnosis, appropriate investigation and implement a management plan.		
Knowledge	Assessment Methods	GMP Domains
Outline the common and serious causes of neck pain including meningeal irritation, trauma, musculoskeletal inflammation, local infection and vascular causes	E, C, Mi, ACAT	1
Understand the investigations required to make a diagnosis	E, C, Mi, ACAT	1
Skills		
Take a full history including recent trauma and appropriate physical examination	E, Mi, D	1
Identify those patients with meningism and consult senior early	Mi, C	1
Order, interpret and act on initial tests	Mi, C	1
Be able to prescribe appropriate analgesia and antibiotics	Mi, C, AA	1
Behaviour		
Ask for senior advice appropriately	ACAT, C	2

CAP22 Oliguric patient

The trainee will be able to produce a differential diagnosis, establish safe monitoring, investigate appropriately and formulate an initial management plan when assessing a patient with a low urine output.		
Knowledge	Assessment Methods	GMP Domains
Understand the principal causes of a low urine output in the critically ill patient, and be able to identify the principal sub-causes (pre-renal, renal and post-renal), including but not limited to: hypotension and inadequate renal perfusion, renal tract obstruction, nephrotoxic drugs and contrast media	E, C, Mi, ACAT	1
Understand current terminology and classification of acute kidney injury	E, C, Mi, ACAT	1
Understand appropriate monitoring of the patient with a low urine output, including but not limited to: clinical assessment, urinary catheterisation, cardiovascular monitoring including pressure and flow monitoring techniques (see principles of monitoring cardiac output), arterial blood gases	E, C, Mi, ACAT	1
Understand the methods of assessment of renal function including but not limited to: blood tests, assessment of renal excretion, imaging of the GU tract	E, C, Mi, ACAT	1
Outline immediate management options including but not limited to: fluid resuscitation, increased cardiovascular monitoring, administration of vasoactive drugs and inotropes, the role of diuretics	E, C, Mi, ACAT	1
Understand the role of renal replacement therapy in the oliguric patient	E, C, Mi, ACAT	1
Be able to safely prescribe for patients in renal failure	E,C, Mi, ACAT	1
Skills		
Make a rapid and immediate assessment including appropriate clinical examination	Mi, C	1
Initiate appropriate immediate management	MI, C	1

Prioritise, order, interpret and act on simple investigations appropriately	Mi, C	1
Initiate early (critical) management (e.g. fluid administration) including requesting safe monitoring	Mi, C	1
Behaviour		
Recognise need for immediate assessment and resuscitation	ACAT, C	1
Assume leadership role where appropriate	ACAT, C	2,3
Involve appropriate senior help to facilitate immediate assessment and management	ACAT, C	3
Involve appropriate specialists to facilitate immediate assessment and management or decreased renal function (e.g. imaging, intensive care, surgeons, renal physicians)	ACAT, C	3

CAP23 Pain Management

The trainee will be able to use analgesic drugs safely and appropriately in the acutely ill patient.		
Knowledge	Assessment Methods	GMP Domains
Demonstrates an understanding of the need for effective management of pain in the acutely unwell patient, including, but not limited to, the items listed below:	E, C, Mi, ACAT	1
Describes how to assess the severity of acute pain including scoring systems such as the Visual Analogue Scale and Verbal Rating Scale	E, C, Mi, ACAT	1
Describes the use of multi-modal therapy and the 'analgesic ladder'	E, C, Mi, ACAT	1
Understands how emotions contribute to pain	E, C, Mi, ACAT	1
Identifies appropriate analgesic regimes including types of drugs and doses	E, C, Mi, ACAT	1
Understands the use of 'rescue analgesia' for the patient with severe pain	E, C, Mi, ACAT	1
Understands the pharmacology of commonly used analgesics including but not limited to: Indications and contraindications, Side effects, Safety profile, Drug interactions	E, C, Mi, ACAT	1
Demonstrates knowledge of commonly used local anaesthetic blocks including peripheral nerve blockade used in the Emergency Department and major conduction blockade as seen in Critical Care	E, C, Mi, ACAT	1
List complications of regional anaesthesia and outlines their treatment including that of local anaesthetic toxicity and respiratory depression due to centrally administered opiates	E, C, Mi, ACAT	1

Skills		
Is able to discuss options for pain relief with the patient and obtain informed consent	Mi, C, D, ACAT	1
Safely prescribes analgesia for the acutely ill patient in pain	Mi, C, ACAT	1
Safely titrates analgesia against level of pain	Mi, C, ACAT	1
Able to programme locally used analgesic devices	Mi, C, D, ACAT	1
Able to undertake the peripheral nerve blocks including but not limited to: digital, wrist (ulnar, median, radial), femoral, facial (auricular, supra-trochlear, supra-orbital), ankle, Bier's Block and know their contraindications	Mi, C, D, ACAT	1
Makes a clear and concise record of interventions in patient's notes	Mi, C, ACAT	1
Behaviour		
Recognises the place of input from specialists in the management of analgesia (e.g. the acute pain team, anaesthesia).	Mi, C, ACAT	2, 3
Ensures safety	Mi, C, ACAT	2
Ensures effectiveness and seeks help if pain is not relieved or is disproportionate	Mi, C, ACAT	2, 3
Works to local and national policies in issuing, handling and disposal of controlled drugs	Mi, C, ACAT	2

CAP24 Painful ear

The trainee will be able to evaluate the patient who presents with painful ears produce a valid differential diagnosis, appropriate investigation and implement a management plan.		
Knowledge	Assessment Methods	GMP Domains
Know the anatomy of the ear	E, C, Mi, ACAT	1
Understand the common causes of ear pain	E, C, Mi, ACAT	1
Understand the common treatments for ear pain	E, C, Mi, ACAT	1
Skills		
Be able to undertake a full exam of the ear	E, D	1
Demonstrate the use of an otoscope	E, D	1
Behaviour		
Know when to refer a patient to ENT for continued care	ACAT, C	2

CAP25 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		
Knowledge	Assessment Methods	GMP Domains
Recall cardiac electrophysiology relevant to ECG interpretation	E, C, Mi, ACAT	1
Recall common causes of palpitations	E, C, Mi, ACAT	1
Recall the categories of arrhythmias	E, C, Mi, ACAT	1
Recall common arrhythmogenic factors including drugs	E, C, Mi, ACAT	1
Recall the indications, contraindications and side effects of the commonly used anti-arrhythmic medications and indications for pacing	E, C, Mi, ACAT	1
Demonstrate knowledge of the management of atrial fibrillation (NICE guidelines)	E, C, Mi, ACAT	1
Skills		
Elucidate nature of patient's complaint	Mi, C	1
Order, interpret and act on initial investigations appropriately: ECG, blood tests	Mi, C	1
Recognise and commence initial treatment of arrhythmias being poorly tolerated by patient (peri-arrest arrhythmias) as per UK Resuscitation Council guidelines	Mi, C	1
Be able to perform carotid sinus massage, DC cardioversion and external pacing safely	D	1
Ensure appropriate monitoring of patient on ward	Mi, C	2
Management of newly presented non-compromised patients with arrhythmias	Mi, C	1
Behaviour		
Consult senior colleagues promptly when required	ACAT, C	3
Advise on lifestyle measures to prevent palpitations when appropriate	ACAT, C, PS	3

CAP26 Pelvic pain

The trainee will be able to evaluate the patient who presents with pelvic pain, produce a valid differential diagnosis, appropriate investigation and implement a management plan.		
Knowledge	Assessment Methods	GMP Domains
Know the causes of pelvic pain and understand when to refer to a surgeon, gynaecologist or GUM specialist	E, C, Mi, ACAT	1
Know the anatomical relationships of the organs in the pelvis	E, C, Mi, ACAT	1
Know how to prescribe safely for a patient with pelvic pain	E, C, Mi, ACAT	1
Skills		
Be able to undertake a full examination of a patient with pelvic pain	E, Mi, C	1
Be able to demonstrate a bimanual pelvic examination, use of a speculum and taking microbiological swabs	E, D	1
Know how to order and interpret appropriate tests	Mi, E, C	1
Behaviour		
Recognise the need for a chaperone	ACAT, C, M	1
Know when to refer to the appropriate specialist	ACAT, C	2

CAP27 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		
Knowledge	Assessment Methods	GMP Domains
Recall indications for activated charcoal and whole bowel irrigation	E, C, Mi, ACAT	1
Know the important symptoms, signs and tests to establish the type of poisoning i.e. to be able to recognise the common toxidromes	E, C, Mi, ACAT	1
Know the presentations of carbon monoxide poisoning	E, C, Mi, ACAT	1
Know the pharmacology and management of poisoning of the following (but not limited to): paracetamol, salicylate, beta blockers, opiates, alcohol, anti-coagulants, benzodiazepines, carbon monoxide, antidepressants, SSRIs, amphetamine, cocaine	E, C, Mi, ACAT	1
Understand the role of antidotes and demonstrates knowledge of specific therapies in poisoning including but not limited to: <ul style="list-style-type: none"> ▪ activated charcoal ▪ acetylcysteine ▪ bicarbonate ▪ hyperbaric oxygen 	E, C, Mi, ACAT	1
Demonstrates understanding of the role of drug testing/screening and of drug levels	E, C, Mi, ACAT	1
Recognise importance of accessing TOXBASE and National Poisons Information Service and the use of the information so obtained	E, C, Mi, ACAT	1
Understand the psychological and physiological and socioeconomic effect of alcohol misuse and illicit drug use – opioids, amphetamines, ecstasy, cocaine, GHB. Understand addiction, dependence and withdrawal syndromes	E, C, Mi, ACAT	1
Skills		
Recognise critically ill overdose patient and resuscitate as appropriate	Mi, C	1

Take a full history of event, including a collateral history if possible	Mi, C	1
Examine to determine the nature and effects of poisoning	Mi, C	1
Demonstrate the ability to actively manage the acutely poisoned patient, including but not limited to: <ul style="list-style-type: none"> ▪ Accessing information required (e.g. TOXBASE) ▪ Use of specific antidotes and antitoxins ▪ Use of 'generic' control measures such as activated charcoal and alkalinisation of urine ▪ Use of renal replacement methods 	Mi, C	2
Order, interpret and act on initial investigations appropriately: biochemistry, arterial blood gas, glucose, ECG, and drug concentrations	E, MI, C	1
Ensure appropriate monitoring in acute period of care (TOXBASE)	Mi, C	1
Perform mental state examination	E, D	1
Practice safe prescribing of sedatives for withdrawal symptoms Ensures correction of malnutrition including vitamin and mineral supplementation	Mi, C, AA	1
Behaviour		
Contact senior promptly in event of critical illness or patient refusing treatment	ACAT, C	3
Recognise the details of poisoning event given by patient may be inaccurate	ACAT, C	2
Show compassion and patience in the assessment and management of those who have self-harmed	ACAT, C, M	4

CAP28 Rash

The trainee will be able assess a patient presenting with an acute-onset skin rash and common skin problems to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Recall the characteristic lesions found in the acute presentation of common skin diseases e.g. cellulitis, erysipelas, impetigo, cutaneous drug reactions, purpuric rashes, skin malignancies	E, C, Mi, ACAT	1
To be able to identify the life-threatening dermatological emergencies, know their causes and emergency management including but not limited to: toxic epidermal necrolysis, Stevens-Johnson syndrome, erythroderma, necrotizing fasciitis	E, C, Mi, ACAT	1
Know the common and serious causes of skin and mouth ulceration	E, C, Mi, ACAT	1
Know the causes of and treatments for pruritus	E, C, Mi, ACAT	1
Recall basic investigations to establish aetiology	E, C, Mi, ACAT	1
Recall risk factors, particularly drugs, infectious agents and allergens	E, C, Mi, ACAT	1
Recall possible medical treatments	E, C, Mi, ACAT	1
Skills		
Take a thorough focused history & conduct a detailed examination, including the nails, scalp and mucosae to arrive at appropriate differential diagnoses	E, Mi, C	1
Recognise the importance of a detailed drug history	E, Mi, C	1
Recognise likely skin and oral malignancy	E, Mi	1
Recognise that anaphylaxis may be a cause of an acute skin rash	Mi, C	1
Order, interpret and act on initial investigations appropriately to establish aetiology	E, Mi, C	1

Implement acute medical care when indicated by patient presentation / initial investigations Identify those patients who are systemically unwell and require admission	Mi, C	1
Behaviour		
Demonstrate sympathy and understanding of patients' concerns due to the cosmetic impact of skin disease	ACAT, C	4
Engage the patient in the management of their condition particularly with regard to topical treatments	ACAT, C	3, 4
Reassure the patient about the long term prognosis and lack of transmissibility of most skin diseases	ACAT, C	3
Know when to liaise with dermatological specialists early for serious conditions	ACAT, C	2, 3

CAP29 Red eye

The trainee will be able to evaluate the patient who presents with a painful red eye, produce a valid differential diagnosis, appropriate investigation and implement a management		
Knowledge	Assessment Methods	GMP Domains
Know the basic anatomy and physiology of the eye and visual pathways	E, C, Mi, ACAT	1
Know the causes of painful red eye including orbital cellulitis	E, C, Mi, ACAT	1
Understand the investigations required to make differential diagnosis of acute red eye including the importance of measuring visual acuity	E, C, Mi, ACAT	1
Know the common treatments for acute red eye	E, C, Mi, ACAT	1
Skills		
Perform full examination including acuity, ocular movements, visual fields, related cranial nerves and adjacent structures	E, D	1
Formulate differential diagnosis	Mi, C	1
Demonstrate the use of a slit lamp, fundoscopy and lid eversion	E, D	1
Demonstrate removal of a foreign body	D	1
Demonstrate the use of fluorescein	D	1
Behaviour		
Know when to refer a patient with red eye for a specialist opinion	ACAT, C	2, 3

CAP30 Mental health

The trainee will be able to evaluate the patient who presents with suicidal ideation, assess risk and formulate appropriate management plan		
Knowledge	Assessment Methods	GMP Domains
Outline the risk factors for a suicidal attempt Know the national guidelines for self harm	E, C, Mi, ACAT	1
Outline the common co-existing psychiatric pathologies that may precipitate suicidal ideation	E, C, Mi, ACAT	1
Outline the indications, contraindications and side effects of the major groups of psychomotor medications	E, C, Mi, ACAT	1
Outline the powers that enable assessment and treatment of patients following self harm or suicidal ideation as defined in the Mental Health Act	E, C, Mi, ACAT	1
Skills		
Take a competent psychiatric history and be familiar with scoring tools used to assess risk of further harm (e.g. Becks score, SAD persons)	E, D, Mi, C	1
Elicit symptoms of major psychiatric disturbance	E, Mi, C	1
Obtain collateral history when possible	Mi, C	1
Recognise and manage anxiety and aggression appropriately	Mi, C	1
Behaviour		
Liaise promptly with psychiatric services if in doubt or high risk of repeat self harm is suspected	ACAT, C	2
Recognise the role of the self harm team and continued community care	ACAT, C	2
Show compassion and patience in the assessment and management of those who have suicidal intent	ACAT, C, M	4

CAP31 Sore throat

The trainee will be able to evaluate the patient who presents with a sore throat produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the causes of a sore throat, and provide a differential diagnosis	E, C, Mi, ACAT	1
Outline the necessary investigations	E, C, Mi, ACAT	1
Know how to prescribe safely	E, C, Mi, ACAT	1
Skills		
Take a full history including associated symptoms such as joint pain, dysphagia etc	E, Mi, C	1
Perform full exam including examination of the neck and lymph nodes	E, Mi, C	1
Recognise when the airway is at risk and manage appropriately	Mi, C	1
Know when antibiotics are indicated	E, Mi, C	1
Behaviour		
Know when to refer to an ENT specialist for admission of follow-up	ACAT, C	2

CAP32 Syncope and pre-syncope

The trainee will be able to assess a patient presenting with syncope to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the definition and common causes of syncope and pre-syncope	E, C, Mi, ACAT	1
Outline the pathophysiology of syncope depending on situation, including but not limited to: vasovagal, cough, effort, micturition, carotid sinus hypersensitivity	E, C, Mi, ACAT	1
Differentiate from other causes of collapse in terms of associated symptoms and signs and eye witness reports	E, C, Mi, ACAT	1
Outline the indications for hospital admission	E, C, Mi, ACAT	1
Outline the indications for cardiac monitoring	E, C, Mi, ACAT	1
Define the recommendations concerning fitness to drive	E, C, Mi, ACAT	1
Skills		
Take thorough history from patient and witness to elucidate episode	E, Mi, C	1
Differentiate pre-syncope from other causes of 'dizziness'	E, C	1
Assess patient in terms of ABC and level of consciousness and manage appropriately	Mi, C	1
Perform examination to elicit signs of cardiovascular disease	E, D	1
Order, interpret and act on initial investigations appropriately: blood tests, ECG	E, Mi, C	1
Behaviour		
Recognise the impact episodes can have on lifestyle particularly in the elderly	ACAT, C	2
Recognise recommendations regarding fitness to drive in relation to syncope	ACAT, C	2

CAP33 Traumatic limb and joint injuries

The trainee will be able to evaluate the patient who presents with a traumatic limb or joint injury produce a valid differential diagnosis, appropriate investigation and implement a management		
Knowledge	Assessment Methods	GMP Domains
Know the anatomy of the axial skeleton and joints	E, C, Mi, ACAT	1
Outline the treatment options for common fractures and joint injuries	E, C, Mi, ACAT	1
Understand the pathophysiology behind complications like compartment syndrome	E, C, Mi, ACAT	1
Know how to prescribe safely for traumatic limb pain	E, C, Mi, ACAT	1
Skills		
Be able to recognise life-threatening trauma	Mi, C, L, S	1
Be able to recognise limb-threatening trauma	Mi, C, L	1
Be able to demonstrate assessment of limb function, detect neurological and vascular compromise	E, D	1
Demonstrate common techniques for joint and fracture reduction	D	1
Behaviour		
Know when to seek senior advice in the management of limb and joint trauma	ACAT, C	2

CAP34 Vaginal bleeding

The trainee will be able to evaluate the patient who presents with vaginal bleeding, produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the causes for vaginal bleeding in different age groups, pre-menopausal, post-menopausal and pregnant women	E, C, Mi, ACAT	1
Understand the early complications of pregnancy and the pathophysiology of an ectopic pregnancy	E, C, Mi, ACAT	1
Know what investigations are required	E, C, Mi, ACAT	1
Understand what drugs (including anti-D immunoglobulin) can be safely prescribed for each cause	E, C, Mi, ACAT	1
Skills		
Be able to demonstrate a full examination	E, D	1
Be able to demonstrate resuscitative procedures for heavy bleeding or cervical shock	Mi, C	1
Behaviour		
Recognise the need for a chaperone	ACAT, C	1, 2
Know when to involve a senior	ACAT, C	2
Know which patient can be discharged safely	ACAT, C	2

CAP35 Ventilatory Support

The trainee will describe or demonstrate their approach to the patient requiring ventilatory support		
Knowledge	Assessment Methods	GMP Domains
Recalls and understands the principles of ventilatory support strategies and local protocols, including but not limited to: oxygen therapy, CPAP, NIV, IPPV	E, C, Mi, ACAT	1
Knowledge of the conditions which may require ventilatory support in the critically ill, including but not limited to: acute respiratory distress syndrome (ARDS)/acute lung injury, exacerbation of airflow obstruction, infection, trauma	E, C, Mi, ACAT	1
Understands the concepts of oxygen delivery and utilisation and work of breathing	E, C, Mi, ACAT	1
Recalls appropriate monitoring and investigation of the patient requiring ventilatory support, including but not limited to: clinical assessment, arterial blood gases, blood tests, radiography	E, C, Mi, ACAT	1
Central venous pressure monitoring and more advanced haemodynamic monitoring	E, C, Mi, ACAT	1
Outline immediate management options including: increasing inspired oxygen fraction, increased respiratory monitoring, initiation of non-invasive ventilation or CPAP, role of invasive mechanical ventilation	E, C, Mi, ACAT	1
Knowledge of problems associated with ventilatory support (e.g. ventilator-associated pneumonia, ventilator-associated lung injury), and strategies available to limit such problems	E, C, Mi, ACAT	1

Skills		
Makes a rapid and appropriate assessment, including: clinical assessment, use of simple airway manoeuvres to restore a patent airway, use of airway adjuncts to restore a patent airway, selection of appropriate oxygen delivery devices	Mi, C, ACAT	1
Initiates appropriate immediate management and performs appropriate further management of the critically ill patient	Mi, C, ACAT, D	1
Demonstrates safe use of local ventilators including: selects appropriate initial ventilator settings, selects 100% oxygen	Mi, C, ACAT	1
Prioritise, order, interpret and act on simple investigations appropriately	Mi, C, ACAT	1
Behaviour		
Recognises need for immediate assessment and resuscitation	Mi, C, ACAT	1
Assumes leadership role where appropriate	Mi, C, ACAT	3
Communicates effectively with patient, relatives, nursing and other staff, during the assessment and the ordering of additional tests and treatment plans	Mi, C, ACAT	2,4
Involves senior and specialist services appropriately	Mi, C, ACAT	2,3

CAP36 Vomiting and Nausea

The trainee will be able to assess a patient with vomiting and nausea to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Recall the causes and pathophysiology of nausea and vomiting	E, C, Mi, ACAT	1
Recall the use and adverse effects of commonly used anti-emetics and differentiate the indications for each and the value of combination therapy	E, C, Mi, ACAT	1
Recall 'red flag' features that make a diagnosis of upper GI malignancy possible	E, C, Mi, ACAT	1
Know the indications for urgent surgical review	E, C, Mi, ACAT	1
Skills		
Elicit signs of dehydration and take steps to rectify this	Mi, C	1
Recognise and treat suspected GI obstruction appropriately: nil by mouth, NG tube, IV fluids	Mi, C	1
Practise safe prescribing of anti-emetics	Mi, C, AA	2
Order, interpret and act on initial investigations appropriately, including but not limited to: blood tests, x-rays, CT scans and endoscopy	E, Mi, C	1
Behaviour		
Involve surgical team promptly in event of GI obstruction	ACAT, C	3
Respect the impact of nausea and vomiting in the terminally ill and involve palliative care services appropriately	ACAT, C	4

CAP37 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)')		
Knowledge	Assessment Methods	GMP Domains
Broadly outline the physiology and neuro-anatomy of the components of the motor system	E, C, Mi, ACAT	1
Recall the myotomal distribution of nerve roots, peripheral nerves, and tendon reflexes	E, C, Mi, ACAT	1
Recall the clinical features of upper and lower motor neurone, neuromuscular junction and muscular lesions	E, C, Mi, ACAT	1
Recall the common and important causes for lesions at the sites listed above	E, C, Mi, ACAT	1
Recall tools for the classification of stroke, and prognosis	E, C, Mi, ACAT	1
Recognise the systemic implications of muscular weakness involving the respiratory and bulbar muscles, including need for airway protection and ventilatory support	E, C, Mi, ACAT	1
Demonstrate knowledge of investigations for acute presentation, including indications for urgent head CT and stroke thrombolysis	E, C, Mi, ACAT	1
Know national guidelines for the management of stroke and TIA	E, C, Mi, ACAT	1
Recognise acquired ICU paresis and understand its implications for ongoing care	E, C, Mi, ACAT	1
Skills		
Elucidate speed of onset and risk factors for neurological dysfunction	E, Mi, C	1
Perform full examination to elicit signs of systemic disease and neurological dysfunction and identify associated deficits	E, D	1

Describe likely site of lesion in motor system and produce differential diagnosis	E, Mi, C	1
Order, interpret and act on initial investigations for motor weakness appropriately	E, Mi, C	1
Recognise when swallowing may be unsafe and manage appropriately	Mi, C	1
Detect spinal cord compromise and investigate promptly	Mi, C	1
Perform tests on respiratory function and inform seniors and specialists appropriately	E, D	1
Ensure appropriate care: thromboprophylaxis, pressure areas	Mi, C, AA	1
Behaviour		
Recognise importance of timely assessment and treatment of patients presenting with acute motor weakness	ACAT, C	2
Consult senior and acute stroke service, if available, as appropriate	ACAT, C	3
Recognise patient and carer's distress when presenting with acute motor weakness	ACAT, C, PS	2
Consult senior when rapid progressive motor weakness or impaired consciousness is present	ACAT, C	3
Involve speech and language therapists appropriately	ACAT, C	3
Contribute to multi-disciplinary approach	ACAT, C	3, 4

CAP38 Wound assessment and management

The trainee will be able to evaluate the patient who presents with a wound and implement a management plan.		
Knowledge	Assessment Methods	GMP Domains
Know how to assess a wound in terms of mechanism of injury, underlying structures and complications	E, C, Mi, ACAT	1
Know the anatomy of the underlying structures especially hand wrist and face	E, C, Mi, ACAT	1
Know of special types of wound: puncture, bites, amputation, de-gloving and presence of foreign bodies	E, C, Mi, ACAT	1
Be able to classify and describe wounds	E, C, Mi, ACAT	1
Know how to manage wounds in the immunocompromised patient	E, C, Mi, ACAT	1
Know how to use local anaesthetic techniques to produce pain-free wounds	E, C, Mi, ACAT	1
Know the indications for tetanus prophylaxis	E, C, Mi, ACAT	1
Know different wound closure techniques Know the indications for delayed closure of wounds and antibiotic treatment	E, C, Mi, ACAT	1
Understand the principles of asepsis	E, C, Mi, ACAT	1
Skills		
Be able to demonstrate the ability to explore a wound and recognise injury to structures	D	1
Be able to demonstrate the technique of wound toilet including removal of foreign bodies	D	1
Demonstrate wound closure, use of dressings	E, D	1
Know when to review a wound and make the appropriate arrangements	Mi, C	1
Behaviour		
Recognise when to refer a complex wound for further care	ACAT, C	2

3.3.4 Anaesthetic Competences CT1&2

Introduction

The anaesthetic section of the ACCS curriculum is taken directly from CCT curriculum in Anaesthetics (annex B). As ACCS trainees normally spend between three and nine months in anaesthetics, only certain elements of the anaesthetic curriculum can be achieved and clearly this will vary depending on the individuals' exposure.

All ACCS trainees completing a three month anaesthetic placement must complete, as a minimum, the Initial Assessment of Competence (IAC), and the associated learning outcomes. If this is not completed during this period, then time during the ICU placement should be allowed to enable the trainee to complete their anaesthesia competences. Without the IAC it will not be possible to achieve an 'outcome 1' at ARCP.

Trainees spending 6 months or longer must complete, in addition to the IAC, the modules listed under the 'Basis of anaesthetic practice', and all the associated learning outcomes. The requirements should be identical to those of the CT anaesthetic trainees within an individual school and again this will be a minimum ARCP requirement;

Basis of anaesthetic practice

- Preoperative assessment
- Premedication
- Induction of general anaesthesia
- Intra-operative care
- Postoperative and recovery room care
- Management of respiratory and cardiac arrest
- Control of infection
- Introduction to anaesthesia for emergency surgery

There are a number of modules within anaesthetic core training, but not part of the 'basis' section, which are of added interest to the ACCS trainee. These include the following modules listed under 'Basic anaesthesia';

1. Airway management
2. Sedation
3. Transfer Medicine
4. Critical incidents

Elements within all these modules are included in the IAC and Basis section. It is suggested that, where possible, the learning outcomes of 1 to 3 above are also addressed during the anaesthetic training and that, in those undertaking a nine month block, this will be the norm.

There are 30 'Critical Incidents' listed in this module. Many are generic and will have been addressed in other parts of ACCS training. Others will be covered in the routine course of anaesthetic training. Trainees should be aware of this list and ensure they have addressed those of direct relevance during their ACCS training.

A Basis of anaesthetic practice

A1 Preoperative Assessment

A1 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

A) History Taking

This training will:

- Develop the ability to elicit a relevant structured history from patients
- Ensure the history obtained is recorded accurately
- Ensure the history is synthesised with the relevant clinical examination

Knowledge

Competence	Description	Assessment Methods	GMP
HT_BK_01	Recognises the importance of different elements of history	A,C,E	1
HT_BK_02	Recognises that patients do not always present history in a structured fashion	A,C,E	1
HT_BK_03	Knows the likely causes and risk factors for conditions relevant to mode of presentation	A,C,E	1
HT_BK_04	Recognises that the patient's agenda and the history should inform examination, investigation and management	A,C,E	1

Skills			
Competence	Description	Assessment Method	GMP
HT_BS_01	Identifies and overcomes possible barriers to effective communication	A,D	3,4
HT_BS_02	Manages time and draws consultation to a close appropriately	A,D	1,3
HT_BS_03	Recognises that effective history taking in non-urgent cases may require several discussions with the patient and other parties, over time	A,C	1
HT_BS_04	Supplements history with standardised instruments or questionnaires when relevant	A,C	3
HT_BS_05	Manages alternative and conflicting views from family, carers, friends and members of the multi-professional team	C,M	3,4
HT_BS_06	Assimilates history from the available information from the patient and other sources including members of the multi-professional team	A,C,M	1,3
HT_BS_07	Recognises and interprets appropriately the use of non-verbal communication from patients and carers	A,D	3,4
HT_BS_08	Focuses on relevant aspects of history and maintains focus despite multiple and often conflicting agendas	A,D	1

B) Clinical Examination

This training will enable the learner to:

- Develop the ability to perform focused, relevant and accurate clinical examination in patients with increasingly complex issues and in increasingly challenging circumstances
- Develop the ability to relate physical findings to history in order to establish diagnosis[es] and formulate management plan[s]

Knowledge

Competence	Description	Assessment Methods	GMP
CE_BK_01	Understands the need for a targeted and relevant clinical examination	A,C,E	1
CE_BK_02	Understands the basis for clinical signs and the relevance of positive and negative physical signs	A,C,E	1
CE_BK_03	Recognises constraints to performing physical examination and strategies that may be used to overcome them	A,C	1
CE_BK_04	Recognises the limitations of physical examination and the need for adjunctive forms of assessment to confirm diagnosis	A,C	1
CE_BK_05	Recognises when the offer/use of a chaperone is appropriate or required	A,C	3,4

Skills

Competence	Description	Assessment Methods	GMP
CE_BS_01	Performs an examination relevant to the presentation and risk factors that is valid, targeted and time efficient	A,D	1
CE_BS_02	Recognises the possibility of deliberate harm [both self harm and harm by others] in vulnerable patients and report to appropriate agencies	A,C,D	2,4
CE_BS_03	Actively elicits important clinical findings	D	1
CE_BS_04	Performs relevant adjunctive examinations	A,D	1

c) 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 post-operative care for common surgical procedures
- Develop the ability to recognise the trainee's 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

Knowledge

Competence	Description	Assessment Methods	GMP
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	A,C,E	1,2
OA_BK_02	Describes the ASA and NCEPOD classifications and their implications in preparing for and planning anaesthesia	A,C,E	1
OA_BK_03	Explains the indications for and interpretation of preoperative investigations	A,C,E	1
OA_BK_04	Lists the indications for preoperative fasting and understand appropriate regimens	A,C,E	1
OA_BK_05	Explains the methods commonly used for assessing the airway to predict difficulty with tracheal intubation	A,C,E	1,2
OA_BK_06	Discusses the indications for RSI	A,C,D,E	1,2
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	A,C,E	1
OA_BK_08	Discusses how to manage drug therapy for co-existing disease in the peri-operative period including, but not exclusively: obesity, diabetic	A,C,E	1

	treatment, steroids, anti-coagulants, cardiovascular medication, epilepsy		
OA_BK_09	Explains the available methods to minimise the risk of thromboembolic disease following surgery	A,C,E	1,2
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	A,C,E	1,2
OA_BK_11	Identifies the principles of consent for surgery and anaesthesia, including the issue of competence	A,C,E	3,4
OA_BK_12	Explains the guidance given by the GMC on consent, in particular: <ul style="list-style-type: none"> • 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 	A,C,E	3,4
OA_BK_13	Summarises the factors determining a patient's suitability for treatment as an ambulant or day-stay patient	A,C,E	1
OA_BK_14	Recalls/lists the factors that affect the risk of a patient suffering PONV	A,C,E	1

Skills			
Competence	Description	Assessment Method	GMP
OA_BS_01	<p>Demonstrates satisfactory proficiency in obtaining a history specifically relevant to the planned anaesthesia and surgery including:</p> <ul style="list-style-type: none"> • 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
OA_BS_02	<p>Demonstrates satisfactory proficiency in performing a relevant clinical examination including when appropriate:</p> <ul style="list-style-type: none"> • 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 	A,D,E	1

OA_BS_03	<p>Demonstrates understanding of clinical data including, but not exclusively:</p> <p>Patient's clinical case notes and associated records</p> <p>Clinical parameters such as:</p> <ul style="list-style-type: none"> • BP, Pulse, CVP • BMI • Fluid balance <p>Physiological investigations such as:</p> <ul style="list-style-type: none"> • ECGs • Echocardiography and stress testing • Pulmonary function tests 	A,C,E	1
OA_BS_04	<p>Demonstrates understanding of clinical laboratory data including:</p> <ul style="list-style-type: none"> • Haematology such as <ul style="list-style-type: none"> ◦ Routine report of Hb, WBC, haematocrit etc • Biochemistry such as <ul style="list-style-type: none"> ◦ Arterial blood gases/acid-base balance • Urea and electrolytes • Liver function • Thyroid function 	A,C,E	1
OA_BS_05	<p>Identifies normal appearances and significant abnormalities in radiographs including:</p> <ul style="list-style-type: none"> • Chest X-rays • Trauma films – cervical spine, chest, pelvis, long bones • Head CT and MRI showing clear abnormalities 	A,C,E	1
OA_BS_06	<p>Makes appropriate plans for surgery:</p> <ul style="list-style-type: none"> • Manages co-existing medicines in the peri-operative period • Plans an appropriate anaesthetic technique[s] • Secures consent for anaesthesia • Recognises the need for additional work-ups and acts accordingly 	A,C,E	1

	<ul style="list-style-type: none"> • Discusses issues of concern with relevant members of the team • Reliably predicts the level of supervision they will require 		
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
OA_BS_08	Provides a balanced view of all care options	A,C,E,M	2,3

A2 Premedication

A2 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

Knowledge

Competence	Description	Assessment Method	GMP
PD_BK_01	Summarises the value of appropriate explanations and reassurance in alleviating the patient's anxiety	A,C,E	1,3
PD_BK_02	Lists basic indications for prescription of premedicant drugs	A,C,E	1
PD_BK_03	Explains how to select appropriate sedative or anxiolytic agents	A,C,E	1
PD_BK_04	Discusses the applied pharmacology of these drugs	A,C,E	1
PD_BK_05	Recalls/lists the factors that influence the risk of patients at increased risk of gastric reflux/aspiration and understands strategies to reduce it	A,C,D,E	1,2
PD_BK_06	Recalls/describes the applied pharmacology of pro-kinetic and antacids including simple alkalis, H ₂ and proton pump antagonists	A,C,E	2
PD_BK_07	Identifies local/national guidelines on management of thromboembolic risk and how to apply them	A,C,E	1,2
PD_BK_08	Explains the principles and practice of using prophylactic antibiotics	A,C,E	1

Skills			
Competence	Description	Assessment Method	GMP
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
PD_BS_02	Explains, in a way the patient understands, the benefits and possible risks of sedative premedication	A,E,M	3,4
PD_BS_03	Selects and prescribes appropriate anxiolytic/sedative premedication when indicated	A,C,E	1

A3 Induction of general anaesthesia

A3 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 patient's co-morbidity to influence appropriate induction technique; shows awareness of the potential complications of process and how to identify and manage them

Knowledge

Competence	Description	Assessment Methods	GMP
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: induction agents, muscle relaxants, analgesics, inhalational agents including side effects, interactions and doses. Identifies the factors that contribute to drug errors in anaesthesia and the systems to reduce them	A,C,D,E	1

IG_BK_02	<p>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</p> <p>Explains the function of the anaesthetic machine including: the basic functions of gas flow, pre-use checking of the anaesthetic machine, the structural features of the anaesthetic machine that minimise errors, the operation of the anaesthetic ventilator, the function of the anaesthetic vaporizers, the operation of any monitoring equipment that is integral with the anaesthetic machine, knows how to replenish anaesthetic vaporizer</p>	A,C,D,E	1,2
<p>IG_BK_03</p> <p>IG_BK_03 cont</p>	<p>In respect of the induction of anaesthesia:</p> <ul style="list-style-type: none"> • 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 	A,C,D,E	1,2

	<ul style="list-style-type: none"> Identifies the special problems of induction associated with cardiac disease, respiratory disease, musculoskeletal disease, obesity and those at risk of regurgitation /pulmonary aspiration 		
IG_BK_04	<p>Describes the principles of management of the airway including:</p> <p>Techniques to keep the airway open and the use of face masks, oral and nasopharyngeal airways and laryngeal mask airways</p>	A,C,D,E	1,2
IG_BK_05	<p>In respect of tracheal intubation:</p> <ul style="list-style-type: none"> 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 endo-bronchial 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 	A,C,D,E	1,2
IG_BK_06	Explains the importance of maintaining the principles of aseptic practice and minimising the risks of hospital acquired infection	A,C,D,E	2
Skills			
Competence	Description	Assessment Methods	GMP
IG_BS_01	Demonstrates safe practice in checking the patient in the anaesthetic room	A,D	1,2

IG_BS_02	Demonstrates appropriate checking of equipment prior to induction, including equipment for emergency use	A,D	1,2
IG_BK_03	In respect of the equipment in the operating environment: <ul style="list-style-type: none"> • Demonstrates understanding of the function of the anaesthetic machine including: <ul style="list-style-type: none"> ○ Performing proper pre-use checks ○ Changing/checking the breathing system ○ Replenishing the vaporizer ○ Changing the vaporizer 	D	1,2
IG_BS_04	Demonstrates safe practice in selecting, checking, drawing up, diluting, labelling and administering drugs	A,D	1,2,3
IG_BS_05	In respect of intravenous cannulation: <ul style="list-style-type: none"> • Obtains intravascular access using appropriate size cannulae in appropriate anatomical location • Demonstrates rigorous aseptic technique when inserting a cannula 	D	1
IG_BS_06	In respect of monitoring: <ul style="list-style-type: none"> • 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 	A,D	1
IG_BS_07	Demonstrates effective pre-oxygenation, including correct use of the mask, head position and clear explanation to the patient	A,D	1,2,3
IG_BS_08	In respect of intravenous induction: <ul style="list-style-type: none"> • 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 	A,D	1,2,3

	<ul style="list-style-type: none"> • Manages the cardiovascular and respiratory changes associated with induction of general anaesthesia 		
IG_BS_09	<p>In respect of inhalational induction of anaesthesia:</p> <ul style="list-style-type: none"> • Satisfactorily communicates with the patient during induction • Satisfactorily conducts induction 	A,D	1,2,3
IG_BS_10	<p>In respect of airway management:</p> <ul style="list-style-type: none"> • 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 	A,D	1,2,3
IG_BS_10 cont	<ul style="list-style-type: none"> • Correctly conducts RSI sequence • Correctly demonstrates the technique of cricoid pressure 		
IG_BS_11	Demonstrates correct use of oropharyngeal, laryngeal and tracheal suctioning	A,D	1,2
IG_BS_12	Demonstrates failed intubation drill	D,S	1,2

A4 Intra-operative care

A4 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

Skills

Competence	Description	Assessment Method	GMP
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	A,D	1,2,3
IO_BS_02	Manages the intra-operative progress of spontaneously breathing and ventilated patients	A,D	1
IO_BS_03	Demonstrates the ability to maintain anaesthesia with a face mask in the spontaneously breathing patient	A,D	1,2
IO_BS_04	Demonstrates the use of a nerve stimulator to assess the level of neuromuscular blockade	A,D	1
IO_BS_05	Manages the sedated patient for surgery	A,D	1,3
IO_BS_06	Maintains accurate, detailed, legible anaesthetic records and relevant documentation	A,C	1
IO_BS_07	Demonstrates role as team player and when appropriate leader in the intra-operative environment	A,D,M	2,3
IO_BS_08	Communicates with the theatre team in a clear unambiguous manner	A,D,M	3

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]	A,C,D,E,M,S	1,2
IO_BS_10	<p>Manages common co-existing medical problems [with appropriate supervision] including but not exclusively:</p> <ul style="list-style-type: none"> • Diabetes • Hypertension • Ischaemic Heart Disease • Asthma and COPD • Patients on steroids 	A,C,D	1,2

A5 Post-operative and recovery room care

A5 Post-operative 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 post-operative complications in patients with a variety of co-morbidities
- The ability to manage post-operative pain and nausea
- The ability to manage post-operative fluid therapy

Core clinical learning outcomes:

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

Knowledge

Competence	Description	Assessment Method	GMP
PO_BK_01	Lists the equipment required in the recovery unit	A,C,E	1
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
PO_BK_03	Describes the care of an unconscious patient in the recovery room, including safe positioning	A,C,D,E	1,2
PO_BK_04	In respect of restoring spontaneous respiration and maintaining the airway at the end of surgery: <ul style="list-style-type: none"> • 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 	A,C,E	1
PO_BK_04 cont	<ul style="list-style-type: none"> • Recalls/identifies how to distinguish between the possible causes of apnoea 		

	<ul style="list-style-type: none"> • Lists the possible causes of post-operative cyanosis • Understands how to evaluate neuromuscular block with the nerve stimulator 		
PO_BK_05	<p>With respect to oxygen therapy:</p> <ul style="list-style-type: none"> • Lists its indications • Knows the techniques for oxygen therapy and the performance characteristics of available devices • Recalls/explains the causes and management of stridor 	A,C,E	1,2
PO_BK_06	<p>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</p>	A,C,E	1
PO_BK_07	<p>In respect of post-operative pain:</p> <ul style="list-style-type: none"> • 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 	A,C,E	1
PO_BK_08	<p>In respect of PONV:</p> <ul style="list-style-type: none"> • 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 	A,C,E	1
PO_BK_09	<p>Recalls/lists the possible causes and management of post-operative confusion</p>	A,C,E	1
PO_BK_10	<p>Knows the causes and describes the management of post-operative hypotension and hypertension</p>	A,C,E	1

PO_BK_11	Identifies the special precautions necessary for the post-operative 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	A,C,E	1,2
PO_BK_12	Explains the prevention, diagnosis and management of post-operative pulmonary atelectasis	A,C,E	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	A,C,E	1
PO_BK_14	Explains the importance of following up patients in the ward after surgery	A,C,E	1,2,3
Skills			
Competence	Description	Assessment Method	GMP
PO_BS_01	Demonstrate appropriate management of tracheal extubation, including; <ul style="list-style-type: none"> • Assessment of return of protective reflexes • Assessment of adequacy of ventilation • Safe practice in the presence of a potentially full stomach 	A,D	1
PO_BS_02	Evaluates partial reversal of neuromuscular blockade, including the use of a nerve stimulator	A,D	1,2
PO_BS_03	Demonstrates the safe transfer of the unconscious patient from the operating theatre to the recovery room	A,C,D	1,2
PO_BS_04	Demonstrates how to turn a patient into the recovery position	A,D	1
PO_BS_05	Makes a clear handover to recovery staff of peri-operative management and the post-operative plan	A,D,M	1,3
PO_BS_06	Prescribes appropriate post-operative fluid regimes	A,C	1

PO_BS_07	Demonstrates the assessment of post-operative pain and prescribes appropriate post-operative analgesia regimes	A,C,D	1,3
PO_BS_08	Demonstrates the assessment and management of post-operative nausea and vomiting	A,C	1
PO_BS_09	Demonstrates the assessment and management of post-operative confusion	A,C	1
PO_BS_10	Recognises when discharge criteria have been met for patients going home or to the ward	A,C,D	1,2,3
PO_BS_11	Undertakes follow-up visits to patients after surgery on the ward	A,C,D	1

Management of Respiratory and cardiac arrest

Management of respiratory and cardiac arrest

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 competences.

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 outcomes:

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

Knowledge

Competence	Description	Assessment Methods	GMP
RC_BK_01	Recalls/lists the causes of a respiratory arrest, including but not limited to: <ul style="list-style-type: none"> • Drugs, toxins • Trauma • Pulmonary infection • Neurological disorders • Muscular disorders 	C,E,S	1
RC_BK_02	Identifies the causes of cardiac arrest, including but limited to: <ul style="list-style-type: none"> • Ischaemic heart disease • Valvular heart disease • Drugs • Hereditary cardiac disease • Cardiac conduction abnormalities • Electrolyte abnormalities • Electrocutation • Trauma • Thromboembolism 	C.E.S	1
RC_BK_03	Demonstrates an understanding of the basic principles of the ECG, and the ability to recognise arrhythmias including but not exclusively:] <ul style="list-style-type: none"> • Ventricular fibrillation • Ventricular tachycardia • Asystole • Rhythms associated with pulseless electrical activity [PEA] 	C,E,S	1
RC_BK_04	Discuss the mode of action of drugs used in the management of respiratory and cardiac arrest in adults and children including but not limited to: <ul style="list-style-type: none"> • Adrenaline 	C,E,S	1

	<ul style="list-style-type: none"> • Atropine • Amiodarone • Lidocaine • Magnesium sulphate • Naloxone 		
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
RC_BK_06	Explains the physiology underpinning expired air ventilation and external chest compressions	C,E,S	1
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
RC_BK_08	Lists advantages and disadvantages of different techniques for airway management during resuscitation of adults and children, including but not limited to: <ul style="list-style-type: none"> • Oro and nasopharyngeal airways • Laryngeal Mask type supraglottic airways including but not limited to: LMA, Proseal, LMA supreme, iGel • Tracheal intubation 	A,C,E,S	1
RC_BK_09	Explains the reasons for avoiding hyperventilation during resuscitation	C,E	1
RC_BK_10	Compares the methods by which ventilation can be maintained in a patient suffering a respiratory or cardiac arrest, using: <ul style="list-style-type: none"> • Mouth to mask • Self inflating bag • Anaesthetic circuit • Mechanical ventilator 	A,C,E,S	1
RC_BK_11	Recalls/explains the mechanism of defibrillation and the factors influencing the success of defibrillation	C,E,S	1
RC_BK_12	Identifies the energies used to defibrillate a patient	C,E,S	1
RC_BK_13	Recalls/discusses the principles of safely and effectively delivering a shock using both manual and automated defibrillator	C,E,S	1
RC_BK_14	Explains the need for continuous chest compressions during resuscitation from cardiac arrest once the trachea is intubated	C,E,S	1

RC_BK_15	Explains the need for minimising interruptions to chest compressions	C,E,S	1
RC_BK_16	Recalls/discusses the reversible causes of cardiac arrest and their treatment, including but not limited to: <ul style="list-style-type: none"> • Hypoxia • Hypotension • Electrolyte and metabolic disorders • Hypothermia • Tension pneumothorax • Cardiac tamponade • Drugs and toxins • Coronary or pulmonary thrombosis 	C,E,S	1
RC_BK_17	Recalls/describes the Adult and Paediatric Advanced Life Support algorithms	C,E,S	1
RC_BK_18	Discusses the specific actions required when managing a cardiac arrest due to: <ul style="list-style-type: none"> • Poisoning • Electrolyte disorders • Hypo/hyperthermia • Drowning • Anaphylaxis • Asthma • Trauma • Pregnancy [including peri-mortem Caesarean Section] • Electrocution 	C,E,S	1
RC_BK_19	Identifies the signs indicating return of a spontaneous circulation	C,E,S	1
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
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
RC_BK_22	Discusses the importance of respecting the wishes of patients regarding end of life decisions	C,E,S	1,3,4
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

RC_BK_24	Discusses the importance of respecting the wishes of relatives to be present during a resuscitation attempt	C,E,S	3,4
RC_BK_25	Describes the value of debriefing meetings and the importance of active participation	C,S	3,4
Skills			
Competence	Description	Assessment Methods	GMP
RC_BS_01	Uses and ABCDE approach to diagnose and commence management of respiratory and cardiac arrest in adults and children	D,S	1
RC_BS_02	Demonstrates correct interpretation of the signs of respiratory and cardiac arrest	S	1,2
RC_BS_03	Maintains a clear airway using basic techniques with or without simple adjuncts: <ul style="list-style-type: none"> • Head tilt • Chin lift • Jaw thrust • Oro- and nasopharyngeal airways 	D,S	1,2
RC_BS_04	Demonstrates correct use of advanced airway techniques including: <ul style="list-style-type: none"> • Supraglottic devices, including but not limited to LMA, Proseal, LMA supreme, iGel • Tracheal intubation 	D,S	1,2,3
RC_BS_05	Maintain ventilation using: <ul style="list-style-type: none"> • Expired air via a pocket mask • Self-inflating bag via facemask, or advanced airway • Mechanical ventilator 	D,S	1,2,3
RC_BS_06	Performs external cardiac compression	D,S	1,2
RC_BS_07	Monitor cardiac rhythm using defibrillator pads, paddles or ECG lead	D,S	1,2,3
RC_BS_08	Uses a manual or automated defibrillator to safely defibrillate a patient	D,S	1,2
RC_BS_09	Turn a patient into the recovery position	D	1,2
RC_BS_10	Prepare a patient for transfer to a higher level of care	A,M	1,2
RC_BS_11	Maintains accurate records of all resuscitation events	A,M	1,2

Control of infection

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 outcomes:

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

Knowledge

Competence	Description	Assessment Methods	GMP
IF_BK_01	Identifies the universal precautions and good working practices for the control of infection including but not limited to: <ul style="list-style-type: none"> • 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] 	A,C,D,E	1,2
IF_BK_02	List the types and treatment of infections contracted by patients usually in the ward and ITU, including but not limited to: <ul style="list-style-type: none"> • MRSA • C Diff 	C,E	1
IF_BK_03	Recalls/discusses the concept of cross infection including: <ul style="list-style-type: none"> • Modes of cross infection • Common cross infection agents 	A,C,E	1
IF_BK_04	Recalls/explains the dynamics of bacterial and viral strain mutation and the resulting resistance to antibiotic treatment	C,E	1
IF_BK_05	Explains the need for antibiotic policies in hospitals	C,E	1,2
IF_BK_06	Recalls/discusses the cause and treatment of common surgical infections during the use of but not limited to: <ul style="list-style-type: none"> • Antibiotics • Prophylaxis 	C,E	1

IF_BK_07	Recalls/lists the types of infection transmitted through contaminated blood including but not limited to: <ul style="list-style-type: none"> • HIV • Hepatitis B and C 	C,E	1
IF_BK_08	Discusses the need for, and application of, hospital immunisation policies	C,E	1
IF_BK_09	Recalls/explains the need for, and methods of, sterilisation	C,E	1
IF_BK_10	Explains the Trust's decontamination policy and their application	C	1
Skills			
Competence	Description	Assessment Methods	GMP
IF_BS_01	Identifies patients at risk of infection and applies an infection mitigation strategy	A,D	1
IF_BS_02	Identifies and appropriately treats the immunocompromised patients	A,C	1,4
IF_BS_03	Be able to administer IV antibiotics taking into account and not limited to: <ul style="list-style-type: none"> • Risk of allergy • Anaphylaxis 	A,D	1,2
IF_BS_04	Demonstrates good working practices, following local infection control protocols and the use of aseptic techniques	A,C,M	1,2
IF_BS_05	Demonstrates the correct use of disposable filters and breathing systems	A,D,M	1
IF_BS_06	Demonstrates the correct use and disposal of protective clothing items including but not limited to: <ul style="list-style-type: none"> • Surgical scrubs • Masks • Gloves 	A,D,M	1, 2
IF_BS_07	Demonstrates the correct disposal of clinical consumable items [single use and reusable]	A,D,M	1, 2

Introduction to anaesthesia for emergency surgery

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 appendicectomy or manipulation of forearm fracture/uncomplicated open reduction and internal fixation] with local supervision

Knowledge

Competence	Description	Assessment Methods	GMP
ES_BK_01	<p>Discusses the special problems encountered in patients requiring emergency surgery and how these may be managed including:</p> <ul style="list-style-type: none"> • 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 coexisting 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 	A,C,E	1,2,3,4
ES_BK_02	<p>In respect of the preparation of acutely ill patients for emergency surgery discusses:</p> <ul style="list-style-type: none"> • 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 	A,C,E	1

	<ul style="list-style-type: none"> The importance of dealing with acute preoperative pain and how this should be managed 		
ES_BK_03	Describes how to recognise the 'sick' patient [including sepsis], their appropriate management and the increased risks associated with surgery	A,C,E	1,2
ES_BK_04	Understands the airway management in a patient with acute illness who is at risk of gastric reflux	A,C,E	1
Skills			
Competence	Description	Assessment Methods	GMP
ES_BS_01	Manages preoperative assessment and resuscitation/optimisation of acutely ill patients correctly	A,C,D	1,2,3,4
ES_BS_02	Demonstrates safe perioperative management of ASA 1 and 2 patients requiring emergency surgery	A,C,D,M	1,2,3,4
ES_BS_03	Manages rapid sequence induction in the high risk situation of emergency surgery for the acutely ill patient	A,D	1

Additional units of training

Airway Management

Airway Management			
Core clinical learning outcomes:			
<ul style="list-style-type: none"> • 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 face mask for a short surgical procedure [less than 30 minutes] 			
Knowledge			
Competence	Description	Assessment Methods	GMP
AM_BK_01	Explains the methods commonly used for assessing the airway to predict difficulty with tracheal intubation	A,C,E	1,2
AM_BK_02	Describes the effect of pre-oxygenation and knows the correct technique for its use	A,C,D,E	1,2
AM_BK_03	Describes the principles of management of the airway including techniques to keep the airway open and the use of face masks, oral and nasopharyngeal airways and laryngeal mask airways	A,C,D,E	1,2
AM_BK_04	Explains the technique of inhalational induction and describes the advantages and disadvantages of the technique	A,C,D,E	1,2
AM_BK_05	Knows the factors influencing the choice between agents for inhalational induction of anaesthesia	A,C,D,E	1,2
AM_BK_06	In respect of tracheal intubation: <ul style="list-style-type: none"> • 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 	A,C,D,E	1,2

AM_BK_06 cont.	<ul style="list-style-type: none"> • 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 		
AM_BK_07	<p>In respect of restoring spontaneous respiration and maintaining the airway at the end of surgery:</p> <ul style="list-style-type: none"> • 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 post-operative cyanosis • Understands how to evaluate neuromuscular block with the nerve stimulator 	A,C,E	1
AM_BK_08	<p>With respect to oxygen therapy:</p> <ul style="list-style-type: none"> • Lists its indications 	A,C,E	1,2

	<ul style="list-style-type: none"> • 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 		
AM_BK_09	Discusses the indications for RSI	A,C,D,E	1,2
AM_BK_10	Describes the care of the airway in an unconscious patient in the recovery room, including safe positioning	A,C,D,E	1,2
AM_BK_11	<p>Lists advantages and disadvantages of different techniques for airway management during resuscitation, including but not limited to:</p> <ul style="list-style-type: none"> • Oral and nasopharyngeal airways • Laryngeal Mask type supra-glottic airways including but not limited to: LMA, Proseal, LMA supreme, iGel • Tracheal intubation 	A,C,E,S	1
AM_BK_12	<p>Compares the methods by which ventilation can be maintained in a patient suffering a respiratory or cardiac arrest, using:</p> <ul style="list-style-type: none"> • Mouth-to- mask • Self-inflating bag • Anaesthetic circuit • Mechanical ventilator 	A,C,E,S	1
AM_BK_13	Discusses the different types of laryngoscope blades available in routine practice and the indications for their use	A,C,E	1
AM_BK_14	Outlines the advantages/disadvantages and reasons for development of new laryngoscopes [e.g. glidescope]	A,C,E	1
AM_BK_15	Outlines the indications for fibre-optic intubation and how awake intubation may be achieved	A,C,E	1,2
AM_BK_16	Describes the management of the 'can't intubate, can't ventilate' scenario	A,C,E	1,2

AM_BK_17	Describes the principles of, and indications for, the use of needle cricothyrotomy and manual jet ventilation	A,C,E	1,2
Skills			
Competence	Description	Assessment Methods	GMP
AM_BS_01	Demonstrates satisfactory proficiency in performing a relevant clinical examination and assessment of the airway and dentition	A,D,E	1
AM_BS_02	Identifies normal appearances and significant abnormalities in radiographs including: <ul style="list-style-type: none"> • Cervical spine, chest • Head CT and MRI showing clear abnormalities relevant to the airway 	A,C,E	1
AM_BS_03	Reliably predicts the level of supervision they will require	A, C,E	1
AM_BS_04	Demonstrates effective pre-oxygenation, including correct use of the mask, head position and clear explanation to the patient	A,D	1,2,3
AM_BS_05	In respect of airway management: <ul style="list-style-type: none"> • 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 	A,D	1,2,3
AM_BS_05 cont.			

	<ul style="list-style-type: none"> • Correctly demonstrates the technique of cricoid pressure 		
AM_BS_06	Demonstrates correct use of advanced airway techniques, including but not limited to: Proseal, LMA supreme, iGel	D,S	1,2
AM_BS_07	In respect of inhalational induction of anaesthesia: <ul style="list-style-type: none"> • Satisfactorily communicates with the patient during induction • Chooses appropriate agent • Satisfactorily conducts induction 	A,D	1,2,3
AM_BS_08	Demonstrates the ability to maintain anaesthesia with a face mask in the spontaneously breathing patient	A,D	1,2
AM_BS_09	Demonstrates failed intubation drill	D,S	1,2
AM_BS_10	Demonstrates management of 'can't intubate, can't ventilate' scenario	D,S	1,2
AM_BS_11	Demonstrates correct use of oropharyngeal, laryngeal and tracheal suctioning	A,D	1,2
AM_BS_12	Demonstrate appropriate management of tracheal extubation, including; <ul style="list-style-type: none"> • Assessment of return of protective reflexes • Assessment of adequacy of ventilation • Safe practice in the presence of a potentially full stomach 	A,D	1
AM_BS_13	Demonstrates how to turn a patient into the recovery position	A,D	1
AM_BS_14	Demonstrates small and large bore needle cricothyrotomy and manual jet ventilation	D,S	1,2
AM_BS_15	Demonstrates surgical cricothyrotomy	D,S	1,2

Procedural Sedation

03 Sedation

Learning outcomes:

- To be able to safely deliver pharmacological sedation to appropriate patients

Core clinical learning outcome:

- Provision of safe and effective sedation to ASA 1 and 2 adult patients, aged less than 80 years of age using a maximum of two short acting agents

Knowledge

Competence	Description	Assessment Methods	GMP
CS_BK_01	<p>Can explain</p> <ul style="list-style-type: none"> What is meant by conscious sedation and why understanding the definition is crucial to patient safety The differences between conscious sedation and deep sedation and general anaesthesia The fundamental difference in techniques/drugs used/patient safety That the significant risks to patient safety associated with sedation technique requires meticulous attention to detail, the continuous presence of a suitably trained individual with responsibility for patient safety, safe monitoring and contemporaneous record keeping 	A,D,E	1,2,3
CS_BK_02	Describes the pharmacology of drugs commonly used to produce sedation	A,C,E	1
CS_BK_07	Can explain the minimal monitoring required during pharmacological sedation	A,C,E	1
CS_BK_08	Describes the indications for the use of conscious sedation	A,C,E	1,2
CS_BK_10	Can explain the use of single drug, multiple drug and inhalation techniques	A,C,E	1,2
CS_BK_11	Describes the particular risks of multiple drug sedation techniques	A,C,E	1,2,3

CS_BK_12	Outlines the unpredictable nature of sedation techniques in children	A,C,E	1,2,3
Skills			
<i>Competence</i>	<i>Description</i>	<i>Assessment Method</i>	<i>GMP</i>
CS_BS_01	Demonstrates the ability to select patients for whom sedation is appropriate part of clinical management	A,C,D	1,2,3
CS_BS_02	Demonstrates the ability to explain sedation to patients and to obtain consent	A,D	1,2,3
CS_BS_03	Demonstrates the ability to administer and monitor inhalational sedation to patients for clinical procedures	A,D	1,2,3
CS_BS_04	Demonstrates the ability to administer and monitor intravenous sedation to patients for clinical procedures	A,D	1,2,3
CS_BS_05	Demonstrates the ability to recognise and manage the complications of sedation techniques appropriately including recognition and correct management of loss of verbal responsiveness	A,D	1,2,3

Transfer Medicine

02 Transfer Medicine: Basis of Anaesthetic Practice and Basic

Learning outcomes:

- Correctly assesses the clinical status of patients and decides whether they are in a suitably stable condition to allow **intra-hospital transfer [only]**
- Gains understanding of the associated risks and ensures they can put all possible measures in place to minimise these risks

Core clinical learning outcome

- Safely manages the intra-hospital transfer of the critically ill but stable adult patient for the purposes of investigations or further treatment [breathing spontaneously or with artificial ventilation] with distant supervision

Knowledge

Competence	Description	Assessment Methods	GMP
TF_BK_01	Explains the importance of ensuring the patients clinical condition is optimised and stable prior to transfer	A,C,E	1,2
TF_BK_02	Explains the risks/benefits on intra-hospital transfer	A,C,E	1,2,
TF_BK_03	Recalls/describes the minimal monitoring requirements for transfer	A,C,E	1,2,3
TF_BK_04	Lists the equipment [and back up equipment] that is required for intra-hospital transfer	A,C,E	1,2
TF_BK_05	Outlines the physical hazards associated with intra-hospital transfer	A,C,E	1,2
TF_BK_06	Explains the problems caused by complications arising during transfer and the measures necessary to minimise and pre-empt difficulties	A,C,E	1,
TF_BK_07	Outlines the basic principles of how the ventilators used for transfer function	A,C,E	1
TF_BK_08	Indicates the lines of responsibility that should be followed during transfer	A,C,E	1,2,3
TF_BK_09	Outlines the consent requirements and the need to brief patients in transfer situations	A,C,E	1,2,3,4

TF_BK_10	Outlines the issues surrounding the carrying/recording of controlled drugs during transfer	A,C,E	1,2,3
TF_BK_11	Describes the importance of keeping records during transfer	A,C,E	1
TF_BK_12	Outlines the problem of infection and contamination risks when moving an infected patient	A,C,E	1,2
TF_BK_13	Explains how to assess and manage an uncooperative and aggressive patient during transfer	A,C,E	1,2,3,4
TF_BK_14	Understands hospital protocols governing transfer patients between departments	A,C,E	1
TF_BK_15	Outlines the importance of maintaining communication, when appropriate with the patient and members of the transfer team	A,C,E	1,2
Skills			
<i>Competence</i>	<i>Description</i>	<i>Assessment Methods</i>	<i>GMP</i>
TF_BS_01	Demonstrates the necessary organisational and communication skills to plan, manage and lead an intra- hospital transfer of a stable patient	A,M	1,2,3,4
TF_BS_02	Demonstrates how to set up the ventilator and confirm correct functioning prior to commencing transfer	A,D	1,2
TF_BS_03	Demonstrates safety in securing the tracheal tube securely prior to commencing the movement/transfer	A,D	1,2
TF_BS_04	Demonstrates the ability to calculate oxygen and power requirements for the journey	A,D	1,2
TF_BS_05	Demonstrates safety in securing patient, monitoring and therapeutics before transfer	A,D	1,2,3,4
TF_BK_06	Demonstrates how to check the functioning of drug delivery systems	A,D	2,3
TF_BS_07	Demonstrates appropriate choices of sedation, muscle relaxation and analgesia to	A,C,D,M	1,2

	maintain the patient's clinical status during transfer		
TF_BS_08	Demonstrates the ability to maintain monitoring of vital signs throughout transfer	A,D	1,2
TF_BS_09	Demonstrates the ability to maintain clinical case recording during transfer	C,M	1

Critical Incidents

Critical incidents

Many of the critical incidents listed in this section are also in the basic level sections of the curriculum to which they relate. Given the importance of the recognition and management of critical incidents, 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.

Knowledge

Competence	Description	Assessment Methods	GM P
Recall/describes the causes, detection and management of the following airway and respiratory/ventilation incidents:			
CI_BK_01	Cardiac and/or respiratory arrest	A,C,E,S	1
CI_BK_02	Unexpected fall in SpO ₂ with or without cyanosis	A,C,E,S	1
CI_BK_03	Unexpected increase in peak airway pressure	A,C,E,S	1
CI_BK_04	Progressive fall in minute volume during spontaneous ventilation or IPPV	A,C,E,S	1
CI_BK_05	Fall in end tidal CO ₂	A,C,E,S	1
CI_BK_06	Rise in end tidal CO ₂	A,C,E,S	1
CI_BK_07	Rise in inspired CO ₂	A,C,E,S	1
CI_BK_08	Unexpected hypotension	A,C,E,S	1
CI_BK_09	Unexpected hypertension	A,C,E,S	1
CI_BK_10	Sinus tachycardia	A,C,E,S	1

CI_BK_11	Arrhythmias: <ul style="list-style-type: none"> • ST segment changes • Sudden tachyarrhythmias • Sudden bradycardia • Ventricular ectopics • Broad complex tachycardia • Atrial fibrillation • Ventricular fibrillation • Pulseless electrical activity (PEA) 	A,C,E,S	1
CI_BK_12	Convulsions	A,C,E,S	1
Recalls/describes the causes, detection and management of the following specific conditions:			
CI_BK_13	Difficult/failed mask ventilation	A,C,E,S	1
CI_BK_14	Failed intubation	A,C,E,S	1
CI_BK_15	Can't intubate, can't ventilate	A,C,E,S	1
CI_BK_16	Regurgitation/aspiration of stomach contents	A,C,E,S	1
CI_BK_17	Laryngospasm	A,C,E,S	1
CI_BK_18	Difficulty with IPPV, sudden or progressive loss of minute volume	A,C,E,S	1
CI_BK_19	Bronchospasm	A,C,E,S	1
CI_BK_20	Pneumothorax and tension pneumothorax	A,C,E,S	1
CI_BK_21	Gas/fat/pulmonary embolism	A,C,E,S	1
CI_BK_22	Adverse drug reaction	A,C,E	1
CI_BK_23	Anaphylaxis	A,C,E	1
CI_BK_24	Transfusion reactions, transfusions of mis-matched blood or blood products	A,C,E	1
CI_BK_25	Inadvertent intra-arterial injection of irritant fluids	A,C,E	1
CI_BK_26	High spinal block	A,C,E,S	1,
CI_BK_27	Local anaesthesia toxicity	A,C,E	1

CI_BK_28	Accidental decannulation of tracheostomy	A,C,E	1
CI_BK_29	Coning due to increases in intracranial pressure	A,C,E	1
CI_BK_30	Malignant hyperpyrexia	A,C,E,S	1
Discuss 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 situational awareness	A,C,E, S	1,2,3,4
CI_BK_32	Awareness of the importance of the process of critical incident reporting	A,C,E,S	1,2,3,4
CI_BK_33	Acceptance that it can happen to you; the unexpected can happen to anyone	A,C,E,S	1,2,3,4
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
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	A,C,E,S	1, 2,3,4
CI-BK_36	The provision of information to the patient and where necessary ensuring they get the appropriate counselling and advice, with appropriate supervision	A,C,E,S	1,2,3,4
Skills			
<i>Competence</i>	<i>Description</i>	<i>Assessment Methods</i>	<i>GMP</i>
CI_BS_01	Demonstrate good non-technical skills such as: effective communication, team working, leadership, decision making and maintenance of high situational awareness	A,C,D,S	1,2,3,4
CI_BS_02	Demonstrates the ability to recognise early a deteriorating situation by careful monitoring	A,C,D,S	1,2,3,4

CI_BS_03	Demonstrates the ability to respond appropriately to each incident listed above	A,C,D,S	1,2,3,4
CI_BS_04	Shows how to initiate management of each incident listed above	A,C,D,S	1,2,3,4
CI_BS_05	Demonstrates ability to recognise when a crisis is occurring	A,C,D,S	1,2,3,4
CI_BS_06	Demonstrates how to obtain the attention of others and obtain appropriate help when a crisis is occurring	A,C,D,S	1, 2,3,4

Speciality specific assessments for Anaesthesia

Assessments for the Initial assessment of competence (IAC)

The ACCS trainee must successfully complete all of the following summative WPBAs:

A-CEX	
Assessment code	Assessment
IAC_A01	Preoperative assessment of a patient who is scheduled for a routine operating list [not urgent or emergency] [0-3 months]
IAC_A02	Manage anaesthesia for a patient who is not intubated and is breathing spontaneously [0-3 months]
IAC_A03	Administer anaesthesia for acute abdominal surgery [0-3 months]
IAC_A04	Demonstrate Rapid Sequence Induction [0-3 months]
IAC_A04	Recover a patient from anaesthesia [0-3 months]

DOPS	
Assessment code	Assessment
IAC_D01	Demonstrate functions of the anaesthetic machine [0-3 months]
IAC_D02	Transfer a patient onto the operating table and position them for surgery [lateral, Lloyd Davis or lithotomy position] [0-3 months]
IAC_D03	Demonstrate cardio-pulmonary resuscitation on a manikin. [0-3 months]
IAC_D04	Demonstrates technique of scrubbing up and donning gown and gloves. [0-3 months]
IAC_D05	Basic Competences for Pain Management – manages PCA including prescription and adjustment of machinery [0-3 months]
IAC_D06	Demonstrates the routine for dealing with failed intubation on a manikin.

CBD	
Examine the case-notes. Discuss how the anaesthetic plan was developed. Ask the trainee to explain their approach to pre-op preparation, choice of induction, maintenance, post op care. Select one of the following topics and discuss the trainees understanding of the issues in context.	
Assessment code	Assessment
IAC_C01	Discuss the steps taken to ensure correct identification of the patient, the operation and the side of operation
IAC_C02	Discuss how the need to minimise postoperative nausea and vomiting influenced the conduct of the anaesthetic
IAC_C03	Discuss how the airway was assessed and how difficult intubation can be predicted
IAC_C04	Discuss how the choice of muscle relaxants and induction agents was made
IAC_C05	Discuss how the trainee's choice of post-operative analgesics was made
IAC_C06	Discuss how the trainee's choice of post-operative oxygen therapy was made
IAC_C07	Discuss the problems emergency intra-abdominal surgery causes for the anaesthetist and how the trainee dealt with these
IAC_C08	Discuss the routine to be followed in the case of failed intubation

For rotations between 6 and 9 months trainees must complete the IAC assessment (defined above) plus the additional WPBA listed below

Optional unit	A-CEX	DOPS	CBD
Airway Management	1	1	1
Sedation	1	1	1
Transfer Medicine	1	1	1
Critical Incidents	1	1	1

3.3.5 Intensive Care Medicine within ACCS

ACCS ICM Competences

It is expected that all ACCS trainees will achieve Basic Level Competence as outlined by IBTICM during ACCS training. Used alongside the rest of the ACCS Curriculum, these ICM specialty-specific competences are designed to inform the IBTICM Basic Level Training Competency Document (Part 3). Assessment should be made using the workplace based assessment tools described, as part of the overall process used to complete this documentation.

Competences in the following areas are detailed in the following section:

- Demonstrates aseptic peripheral venous cannulation
- Demonstrates aseptic arterial cannulation (+ local anaesthetic)
- Obtains an arterial blood gas sample safely, interprets results correctly
- Demonstrates aseptic placement of central venous catheter
- Connects mechanical ventilator and selects initial settings
- Describes safe use of drugs to facilitate mechanical ventilation
- Describes principles of monitoring respiratory function
- Describes the assessment of the patient with poor compliance during ventilatory support ('fighting the ventilator')
- Prescribes safe use of vasoactive drugs and electrolytes
- Delivers a fluid challenge safely to an acutely unwell patient
- Describes actions required for accidental displacement of tracheal tube or tracheostomy

ICM Competency: Demonstrates aseptic peripheral venous cannulation

<p>The trainee will be able to establish venous access a peripheral route (See also: ICM Competences: Establishes venous access with attention to infection control measures)</p>		
Knowledge	Assessment Methods	GMP Domains
Demonstrates knowledge of venous anatomy and surface anatomy	D	1
To demonstrate an understanding of the need for using appropriate infection control measures when establishing venous access, including but not limited to:	D	1
Understanding of aseptic 'no touch' technique (ANTT) of venous cannulation	D	1
Understanding of sterile techniques of venous cannulation	D	1
Establishing venous access in an appropriate environment and use of appropriate equipment in an aseptic or sterile way appropriate to the procedure	D	1
Use of appropriate skin cleaning methods and the currently recommended cleaning agents	D	1
Skills		
Demonstrate the ability to establish peripheral venous cannulation using an appropriate technique, demonstrating effective infection control measures and proper regard for patient safety and well being	D	1

Behaviour		
Obtains consent wherever possible	D	2, 4
Demonstrates the ability to communicate effectively with the patient and other staff when establishing venous access	D, ACAT	2
Maintains safety of environment for patient and health workers including safe sharps disposal	ACAT, D	2
Adequately documents procedures including date labelling of peripheral cannulae and completion of departmental audit databases	D, Mi, AA	1
Demonstrates ability to consult with a senior, seeks appropriate team support	ACAT, AA, C, Mi	2

ICM Competency: Demonstrates aseptic arterial cannulation (+ local anaesthetic)

The trainee discusses indications and contraindications to arterial cannulation and demonstrates aseptic placement of an arterial cannula, using local anaesthesia where appropriate		
Knowledge	Assessment Methods	GMP Domains
Demonstrates knowledge of anatomy of radial, femoral and brachial arteries and relevant surface anatomy and demonstrates knowledge of Allen's test and its limitations	Mi, C	1
Demonstrates knowledge of indications and contraindications of arterial cannulation	Mi, C	1
Demonstrates knowledge of local anaesthetic pharmacology	Mi, C	1
Demonstrates knowledge of equipment used in arterial cannulation including but not limited to: 'Flowswitch' and Seldinger cannulae, disposable transducers, multi-channel monitors including invasive channel 'zeroing'	Mi, C	1
Skills		
The trainee demonstrates the ability to run-through a disposable transducer system	E, D	1
The trainee performs arterial cannulation using the transfixion or Seldinger technique.	E, D	1
The trainee demonstrates the ability to attach transducer system and zero the transducer	E, D	1
Behaviour		
Seeks consent wherever possible	ACAT, C, Mi	2, 4
Demonstrates the ability to communicate effectively with the patient and other staff when establishing venous access	ACAT, C, Mi	2, 4
Maintains safety of environment for patient and health workers including safe sharps disposal	ACAT, C, Mi	2, 4
Seeks senior help when appropriate	ACAT, C, Mi	2, 4

ICM Competency: Obtains an arterial blood gas sample safely, interprets results correctly

The trainee will be able to obtain an arterial blood gas safely and correctly interpret the results		
Knowledge	Assessment Methods	GMP Domains
Demonstrates knowledge of <ul style="list-style-type: none"> • the surface anatomy of the radial and femoral arteries • use of appropriate skin cleaning methods and the currently recommended cleaning agents • use of appropriate sterile techniques • the requirement for heparinised syringes and transport of samples on ice 	E, C, M, ACAT,	1
Demonstrates knowledge of normal values of pH, PaO ₂ , PaCO ₂ , standard bicarbonate or base excess and lactate	E, C, M, ACAT,	1
Demonstrates understanding of common blood gas derangements including but not limited to: <ul style="list-style-type: none"> • Hypoxia • Hypercapnia • Metabolic acidosis and lactic acidosis • Metabolic alkalosis 	E, C, M, ACAT,	1
Is able to calculate the anion gap and recall causes of increased and decreased anion gap	E, C, M, ACAT,	1
Demonstrate an understanding of the need for appropriate communication with the patient about arterial blood gas sampling, including but not limited to: <ul style="list-style-type: none"> ▪ Appropriate explanation to the patient ▪ Obtaining implied or explicit consent 	E, C, M, ACAT,	1

Skills		
The trainee is able to safely obtain an arterial blood gas sample using either the radial or femoral route	D	1
Demonstrates rigorous aseptic technique when obtaining blood gas sample Compresses artery following sampling Correctly interprets results Records the results in the patient's record	D	1
Behaviour		
Follows local protocols in use of near-patient testing versus laboratory testing	ACAT, C, Mi	1
Demonstrates the ability to effectively communicate the procedure with nursing and other staff	ACAT, C, Mi	1

ICM Competency: Demonstrates aseptic placement of central venous catheter

<p>The trainee will be able to discuss indications, contraindications and complications of central venous catheters (CVC's). The trainee describes indications and contraindications of the internal jugular, subclavian and femoral route. The trainee can describe the advantages and disadvantages of peripherally inserted central venous catheters (PICC lines). The trainee demonstrates aseptic placement of a CVC by the above routes</p>		
Knowledge	Assessment Methods	GMP Domains
Demonstrates knowledge of the anatomy of the anterior triangle of the neck, the subclavian region and the groin	C, Mi	1
Knowledge of ultrasound anatomy of the anterior triangle of the neck and the groin	E, C, Mi	
<p>Discusses indications for CVC insertion in the critically ill patient</p> <p>Demonstrates an understanding of the specific risks and benefits of selected insertion sites including but not limited to:</p> <ul style="list-style-type: none"> ▪ Arterial puncture ▪ Arterio-venous fistulae ▪ Cranial nerve damage ▪ Pneumothorax ▪ Infection <p>Understands relative and absolute contra-indications</p>	C, Mi, ACAT	1
Knowledge of local anaesthetic pharmacology	E, C	1
Demonstrates knowledge of equipment used for central venous catheterisation including but not limited to: Seldinger technique, multi-lumen catheters, ultrasound systems, transducer systems	C, Mi, ACAT	1
Demonstrates knowledge of the correct positioning of central venous catheters on the supine CXR. Knowledge of complications of CVC insertion	C, Mi, ACAT	1

Skills		
The trainee can set up the ultrasound machine, select appropriate depth and gain and apply a sterility sheath	D	1
The trainee safely and aseptically performs placement of CVC's using the: <ul style="list-style-type: none"> • Internal Jugular approach • Subclavian approach • Femoral approach 	D, C	1
The trainee correctly interprets the post-procedure CXR, confirming correct positioning and excluding major complications	D, Mi, ACAT	1
Behaviour		
Obtains consent where possible	ACAT, C, Mi	(3,6,7)
Uses sedation and local anaesthesia appropriately	D	(3,6,7)
Observes local infection control procedures including ANTT and local "High Impact Intervention" central line "Care Bundle"	D, C	
Maintain safety of environment for patient and health workers including safe sharps disposal	ACAT, C, Mi	2
Adequately documents procedures including date labelling of peripheral cannulae and completion of departmental audit databases	D, Mi	
Demonstrates the ability to work in a team and succinctly present clinical details of the situation to senior doctor	ACAT, C, Mi	3
Demonstrates ability to consult with a senior, seek appropriate team support	ACAT, AA, C, Mi,	2

ICM Competency: Connects mechanical ventilator and selects initial settings

ICM Competency: Connects mechanical ventilator and selects initial settings		
Knowledge	Assessment Methods	GMP Domains
<p>Lists the indications for mechanical ventilation including but not limited to:</p> <ul style="list-style-type: none"> • Respiratory disease (differentiating Types 1 and 2) • Chest wall disease • Neuromuscular disease • Central nervous system impairment • Cardiovascular disease • Post-operative management 	E, C, Mi, ACAT	1
<p>Demonstrates knowledge of the modes of mechanical ventilation including</p> <ul style="list-style-type: none"> • Volume controlled and pressure controlled ventilation • Timing windows and the use of SIMV • The use of pressure supported breaths • The rationale for the use of PEEP • Rationale and use of inverse ratio ventilation • The causes and detection of "auto-PEEP" 	C, Mi, ACAT, AA	1
<p>Demonstrates knowledge of a lung protective ventilator strategy including</p> <ul style="list-style-type: none"> • Volume and pressure limitation • The use of permissive hypercapnia and its side effects • Contraindications to lung protective ventilation 	C, Mi, ACAT, AA	1
<p>Demonstrates knowledge of the "Ventilator Care Bundle"</p>	C, Mi, ACAT, AA	1

Skills		
Sets up and performs circuit check and safety check of the relevant ventilator	D	1
Sets appropriate settings including: <ul style="list-style-type: none"> • Peak inspiratory pressure or tidal volume • i:e ratio • PEEP 	D, C, ACAT	1
Behaviour		
Ensures patient safety throughout	C, Mi, ACAT	2, 4
Uses appropriate monitoring including pulse oximetry and capnography	C, Mi, ACAT	1
Communicates target values and parameters to other members of the team and ensures appropriate documentation	C, Mi, ACAT	1
Sets appropriate alarms	C, Mi, ACAT	1

ICM Competency: Describes Safe Use of Drugs to Facilitate Mechanical Ventilation

The trainee will be able to describe the use of drugs to facilitate mechanical ventilation, the safe and appropriate use of sedative drugs, analgesics and paralytic agents, appropriate methods of administration and problems associated with use of such agents		
Knowledge	Assessment Methods	GMP Domains
Demonstrate knowledge of drugs which can be used to induce anaesthesia and facilitate tracheal intubation	C, Mi	1
Demonstrate knowledge of drugs which can be used to sedate patients during mechanical ventilation, and the advantages and disadvantages of these drugs Demonstrate an understanding of how using combinations of sedative agents may be preferable to use of single agents	C, Mi	1
Outlines rationale for use of neuromuscular blocking drugs during mechanical ventilation and appropriate pharmacology	C, Mi	1
Demonstrate an understanding of the role of regular 'sedation interruptions' in the management of the critically ill patient	C, Mi	
Outline problems associated with the use of sedation to facilitate ventilation in the critically ill	C, Mi	
Skills		
The trainee will be able to demonstrate the safe handling of equipment used to deliver sedative agents used during mechanical ventilation, including appropriate use of syringe drivers	D	1
Demonstrate the ability to effectively used appropriate scoring systems to assess level of sedation	D, Mi	1
Practice safe prescribing of all agents used to facilitate mechanical ventilation	D, C, Mi	1

Behaviour		
Demonstrate the ability to communicate the sedation requirements of a patient to the Intensive Care Medicine team	C, Mi, ACAT	1
Demonstrate the ability to work in a team and succinctly present clinical details of the situation to a senior doctor	C, Mi, ACAT	3
Demonstrate ability to consult with a senior, seek appropriate team support	C, Mi, ACAT, AA	2

ICM Competency: Describes Principles of Monitoring Respiratory Function

The trainee will describe methods used to monitor respiratory function		
Knowledge	Assessment Methods	GMP Domains
Demonstrate an ability to perform an effective evaluation of respiratory function in the critically ill patient, including but not limited to: <ul style="list-style-type: none"> ▪ Clinical evaluation of the respiratory system ▪ Use of respiratory parameters monitored by artificial ventilators, including airway pressure, tidal volumes, minute ventilation, respiratory rates and spirometry 	C, D, Mi	1
Skills		
Perform immediate (physical) assessment of the respiratory system	ACAT, D, C, Mi	1
Be able to order and interpret and act on investigations appropriately, including but not limited to: <ul style="list-style-type: none"> ▪ CXR ▪ CT scans ▪ USS 	C, Mi	1
Demonstrate ability to interpret capnograph waveforms and pressure volume loops during mechanical ventilation	D, Mi, C, ACAT, E	1
Behaviour		
Exhibit calm and methodical approach to assessing the critically ill patient	ACAT, AA, C, Mi	1
Adopt leadership role where appropriate	ACAT, AA, C, Mi	2
Involve senior and specialist (e.g. radiology) services promptly	ACAT, AA, C, Mi	2

ICM Competency: Describes the assessment of the patient with poor compliance during ventilatory support ('fighting the ventilator')

The trainee will be able to describe the assessment of the patient showing poor compliance with mechanical ventilation, and an understanding of the steps which may be used to improve compliance		
Knowledge	Assessment Methods	GMP Domains
Demonstrate knowledge of conditions which may require ventilatory support, including but not limited to: <ul style="list-style-type: none"> ▪ Infection ▪ Acute Respiratory Distress Syndrome (ARDS) ▪ Cardiac failure ▪ Obstructive airways disease (acute and chronic) 	C, Mi	1
Demonstrate knowledge of the different requirements and modes of respiratory support, including but not limited to: <ul style="list-style-type: none"> ▪ Continuous mandatory ventilation / assist control ventilation ▪ Intermittent mandatory ventilation ▪ Pressure support ventilation ▪ PEEP/CPAP 	C, Mi	1
Be able to describe the possible causes of poor compliance with respiratory support, including but not limited to: <ul style="list-style-type: none"> ▪ Airway obstruction or other mechanical problems ▪ Altered clinical condition ▪ Altered sedation requirements ▪ Selection of inappropriate mode of ventilatory support 	C, Mi, D	1

Be aware of the role drugs and combinations of drugs in the facilitation of mechanical ventilation, including but not limited to: <ul style="list-style-type: none"> • Sedative agents • Drugs with respiratory depressant effects • Drugs with neuromuscular blocking actions 	C, Mi	1
Demonstration of understanding of the need for prompt and appropriate action to prevent hypoxia and respiratory distress when faced with the patient who is not compliant with ventilation, including but not limited to: <ul style="list-style-type: none"> ▪ Increasing inspired oxygen fraction ▪ Use of manual ventilation techniques when required 	C, Mi	1
Skills		
Be able to demonstrate appropriate rapid assessment of the patient who is non-compliant with ventilation, and to institute appropriate life-saving measures until help arrives, including increasing the inspired oxygen settings	D, Mi	1
Demonstrate the ability to effectively decide when manual ventilation techniques should be used until experienced help arrives	D, Mi	1
Demonstrate the ability to order appropriate tests and investigations, including but not limited to: <ul style="list-style-type: none"> ▪ Chest radiography ▪ Arterial blood gas analysis 	D, ACAT, C, Mi	1
Behaviour		
Demonstrate the ability to communicate the ventilatory requirements of a patient to the Intensive Care Medicine team	ACAT, C, Mi	1
Maintain safety of environment for patient and health workers	ACAT, C, Mi	2
Demonstrate the ability to work in a team and succinctly present clinical details of the situation to a senior doctor	ACAT, C, Mi	3
Demonstrate ability to consult with a senior, seek appropriate team support	ACAT, C, Mi	2

ICM Competency: Prescribes safe use of vasoactive drugs and electrolytes

The trainee will understand the use of electrolyte-containing solutions and vasopressors in the critically ill patient, and be able to prescribe such agents safely		
Knowledge	Assessment Methods	GMP Domains
<p>List physiological electrolyte requirements in health and in the critically ill patient, and list common causes of electrolyte disturbances in the critically ill, including but not limited to:</p> <ul style="list-style-type: none"> ▪ Altered cardiovascular, respiratory and renal function ▪ Altered metabolic processes ▪ Iatrogenic causes of electrolyte imbalance 	C, Mi	1
Demonstrate knowledge of commonly available electrolyte solutions, and the advantages and disadvantages of using such solutions	ACAT, AA, C, Mi	1
<p>Demonstrate knowledge of the use of potassium containing solutions, including but not limited to:</p> <ul style="list-style-type: none"> • Clinical situations where such solutions may be required • Problems associated with the use of K⁺ solutions • Precautions and safety measures required • Appropriate monitoring and assessment during administration 	ACAT, C, Mi	1
Demonstrate knowledge of pharmacology of commonly used vasoactive agents	Mi, C, ACAT, E	1

Demonstrate knowledge of the use of vasopressors, including but not limited to: <ul style="list-style-type: none"> ▪ Clinical situations when vasopressor agents may be used ▪ Problems associated with the use of vasopressors ▪ Appropriate levels of monitoring and assessment during the administration of vasopressors ▪ Venous access required for the safe administration of vasopressors 	Mi, C, ACAT	1
Skills		
Perform safe prescription of electrolyte solutions and vasoactive agents	ACAT, AA, C, Mi	1
Arrange monitoring of relevant indices	ACAT, AA, C, Mi	1
Order, interpret and act on initial investigations	ACAT, AA, C, Mi	1
Behaviour		
Exhibit a calm and methodical approach to the critically ill patient	ACAT, AA, C, Mi	3
Adopt leadership role where appropriate	ACAT, AA, C, ACAT	2,4
Involve senior and specialist services appropriately	ACAT, AA, C, Mi	2, 3

ICM Competency: Delivers a fluid challenge safely to an acutely unwell patient

The trainee will demonstrate an understanding of the need to assess the fluid status of an acutely unwell patient, the ability to do perform this assessment using clinical and other means, and to safely administer an appropriate fluid bolus to such a patient		
Knowledge	Assessment Methods	GMP Domains
Demonstrates an understanding of the need to assess the fluid status of the acutely unwell patient, when such assessment is necessary, and the need for reassessment and additional monitoring	C, Mi	1
Lists methods available to assess fluid status of the acutely unwell patient, including but not limited to clinical assessment and use of monitoring devices (for example, central venous pressure and saturation, oesophageal Doppler)	ACAT, C, Mi	1
<p>Outlines advantages and disadvantages of the different fluids which can be used for administration during the management of the acutely unwell patient, including but not limited to:</p> <ul style="list-style-type: none"> ▪ Crystalloid solutions ▪ Colloids ▪ Blood products 	ACAT, Mi, C	1
Skills		
Appropriately assesses and establishes the need for a fluid bolus in an acutely unwell patient	ACAT, Mi, C, D	1
Selects appropriate fluid and prescribes appropriate volumes during administration of a fluid bolus	ACAT, C, Mi	1
Effectively assesses the response to a fluid bolus, and makes appropriate clinical decisions based on this response	ACAT, Mi, C, D	1
Completes adequate documentation of fluids prescribed and documents the response to any fluid challenge administered	ACAT, C, Mi	1

Behaviour		
Demonstrate the ability to communicate effectively with the patient and other staff when delivering a fluid bolus	ACAT, C, Mi	3
Demonstrates the ability to effectively communicate the procedure with nursing and other staff	ACAT, C, Mi	2,4
Involves senior and specialist services appropriately.	ACAT, C, Mi	2,3

ICM Competency: Describes actions required for accidental displacement of tracheal tube or tracheostomy

The trainee will describe or demonstrate their approach to the management of a displaced endotracheal or tracheostomy tube		
Knowledge	Assessment Methods	GMP Domains
To demonstrate an understanding of the need for immediate assessment of the patient with a suspected airway problem	C, Mi	1
Outlines immediate airway management appropriate to the patient's needs, including but not limited to: Simple airway manoeuvres Use of airway adjuncts Delivery of 'high-flow' oxygen using appropriate devices Re-establishing a definitive airway (re-intubation) Use of bag, valve mask ventilation	ACAT, C, Mi	1
Lists the drugs which may be required to re-establish endotracheal intubation, including but not limited to: Sedative agents Analgesic agents Neuromuscular blocking agents	ACAT, C, Mi	1
To demonstrate an understanding of the need for continued or additional monitoring, including but not limited to: Pulse oximetry Capnography	ACAT, C, Mi	1

Skills		
<p>Performs an effective, organised and airway assessment, including but not limited to:</p> <p>Use of simple airway manoeuvres to restore a patent airway</p> <p>Use of airway adjuncts to restore a patent airway</p> <p>Selection of appropriate oxygen delivery devices</p> <p>Use of bag, valve mask ventilation</p> <p>The need for rapid assessment of circulatory status</p> <p>Appropriate use of crystalloid or other fluids for volume resuscitation where required</p>	ACAT, C, Mi, D	1
<p>Completes adequate documentation and communicates effectively with medical and other ward staff</p>	ACAT, C, Mi	1
Behaviour		
<p>Demonstrate the ability to lead a full, prompt assessment of a patient with a compromised airway</p>	ACAT, C, Mi	3
<p>Demonstrates the ability to communicate effectively with both the patient and their relatives</p>	ACAT, C, Mi	2
<p>Demonstrates the ability to effectively communicate with nursing and other staff</p>	ACAT, C, Mi	2,4
<p>Involves senior and specialist services appropriately</p>	ACAT, C, Mi	2,3

3.3.6 Additional Adult Acute Presentations CT3

The competences associated with the following presentations should be achieved during the CT3 year. The specific details of the required knowledge, skills and behaviours are set out in this section.

<u>C3AP1a Major trauma - Chest Injuries</u>	Page 246
<u>C3AP1b Major trauma - Abdominal trauma</u>	247
<u>C3AP1c Major trauma - Spine</u>	248
<u>C3AP1d Major trauma - Maxillofacial</u>	249
<u>C3AP1e Major trauma - Burns</u>	250
<u>C3AP2a Traumatic limb and joint injuries - Lower limb</u>	251
<u>C3AP2b Traumatic limb and joint injuries - Upper limb</u>	252
<u>C3AP3 ABGs -Interpretation of abnormal blood gas results in the Emergency Department</u>	254
<u>C3AP4 Abnormal blood glucose</u>	255
<u>C3AP5 Dysuria</u>	256
<u>C3AP6 Emergency airway care (CT3 and covers HST)</u>	257
<u>C3AP7 Needlestick injury</u>	258
<u>C3AP8 Testicular pain</u>	259
<u>C3AP9 Urinary retention</u>	260

C3AP1a Major trauma - Chest Injuries

<p>The trainee will be able to evaluate the patient who presents with major trauma and to identify and treat the life-threatening presentations, to produce a valid differential diagnosis, appropriate investigation and implement a management plan. The trainee builds on previous training with more detailed knowledge, skills and behaviours</p>		
Knowledge	Assessment Methods	GMP Domains
Know the patho-physiology of cardiothoracic injury	E, Mi, C, ACAT	1
Be able to identify life-threatening chest trauma i.e. tension pneumothorax, open pneumothorax, flail chest massive haemothorax, and cardiac tamponade	E, Mi, C, ACAT	1
Be able to identify those patients with potential aortic injury, diaphragmatic rupture, pulmonary contusion, myocardial contusion, oesophageal rupture, tracheo-bronchial injury, rib and sternal fractures	E, Mi, C, ACAT	1
Know the associated plain radiology and CT appearances of these injuries	E, Mi, C, ACAT	1
Skills		
Be able to undertake systematic approach and identify these conditions	Mi,C,E, D, L	1
Be able to undertake needle thoracocentesis, chest drain insertion and pericardiocentesis	Mi,C,E, D, L	1
Be able to detect the deteriorating patient	Mi,C,E, D, L	1
Behaviour		
Be meticulous in assessment and undertake repeated assessment	Mi, C	1,2,3,4
Know when to refer to cardiothoracic surgery	Mi, C	1, 2, 3, 4

C3AP1b Major trauma - Abdominal trauma

The trainee will be able to evaluate the patient who presents with major trauma and to identify and treat the life-threatening presentations, to produce a valid differential diagnosis, appropriate investigation and implement a management plan. The trainee builds on previous training with more detailed knowledge, skills and behaviours

Abdominal injuries - to be able to identify those patients who have sustained significant abdominal trauma by history, examination and appropriate investigation

Knowledge	Assessment Methods	GMP Domains
Know the different presentations of blunt and penetrating abdominal trauma and the structures that may be damaged, Specifically blunt splenic, hepatic, renal, pancreatic trauma, hollow viscus injury, urethral/bladder and testicular trauma	E, Mi, C, ACAT	1
Know the indications for FAST scanning, CT, and immediate laparotomy	E, Mi, C, ACAT	1
Skills		
Be able to assess and repeatedly reassess the traumatic abdomen	Mi, C, D, L	1
Recognise the influence of injuries elsewhere on abdominal assessment	Mi, C, D, L	1
Be able to pass a urinary catheter and gastric tube safely	Mi, C, D, L	1
Behaviour		
Communicate effectively with the surgical team in a timely fashion	Mi, C	1, 2, 3, 4

C3AP1c Major trauma - Spine

The trainee will be able to evaluate the patient who presents with major trauma and to identify and treat the life-threatening presentations, to produce a valid differential diagnosis, appropriate investigation and implement a management plan. The trainee builds on previous training with more detailed knowledge, skills and behaviour

Spinal injury - recognise those patients who have suffered a spinal cord, peripheral nerve or plexus injury by appropriate history examination and investigation

Knowledge	Assessment Methods	GMP Domains
Know the patho-physiology of the different mechanisms of spinal trauma	E, Mi, C, ACAT	1
Know how to interpret imaging for the whole length of the spine, including plain films, CT and MRI	E, Mi, C, ACAT	1
Know how to care for the spinal-injured patient	E, Mi, C, ACAT	1
Skills		
Be able to examine a patient with possible spinal injury	Mi, C, D, L	1
Be able to immobilise a patient with spinal injury	Mi, C, D, L	1
Be able to log roll and transfer a patient	Mi, C, D, L	1
Behaviour		
Communicate effectively with the neurosurgical or orthopaedic team in a timely fashion	Mi, C	1,2

C3AP1d Major trauma - Maxillofacial

The trainee will be able to evaluate the patient who presents with major trauma and to identify and treat the life-threatening presentations, to produce a valid differential diagnosis, appropriate investigation and implement a management plan. The trainee builds on previous training with more detailed knowledge, skills and behaviours

Maxillofacial trauma - to identify those patients and characterise their injuries, including eye trauma

Knowledge	Assessment Methods	GMP Domains
Know the anatomy of the facial structures	E, Mi, C, ACAT	1
Know when underlying structures may be at risk from facial lacerations-specifically parotid duct, facial nerve and lacrimal duct	E, Mi, C, ACAT	1
Be able to identify and initially manage nasal, Le Fort, mandibular, orbital and zygomatic fractures and TMJ dislocation. Be able to identify and initially manage dental fractures, tooth avulsion	E, Mi, C, ACAT	1
Be able to recognise hyphaema, lens dislocation, orbital floor fractures, penetrating injuries of the eye and eyelid lacerations	E, Mi, C, ACAT	1
Skills		
Be able to systematically assess the facial structures and recognise when the airway is threatened	Mi, C, D	1
Be able to initiate management of torrential nasopharyngeal bleeding by the use of Foley catheters and reduction of mid-face fractures	Mi, C, D	1
Behaviour		
Know when to refer to maxillofacial specialists in a timely fashion	Mi, C	2

C3AP1e Major trauma - Burns

The trainee will be able to evaluate the patient who presents with major trauma and to identify and treat the life-threatening presentations, to produce a valid differential diagnosis, appropriate investigation and implement a management plan. The trainee builds on previous training with more detailed knowledge, skills and behaviours

Burns - to be able to evaluate the patient with burns, commence resuscitation, relieve pain and refer appropriately

Knowledge	Assessment Methods	GMP Domains
Be able to understand the patho-physiology of burns	E, Mi, C, ACAT	1
To be able to assess the size and depth of burn and calculate the fluid requirements	E, Mi, C, ACAT	1
To recognise the risks to the upper and lower airway from heat and inhalation injury	E, Mi, C, ACAT	1
To recognise the importance of burns in special areas (face, joints, perineum)	E, Mi, C, ACAT	1
To know the indications for referral to burns/specialist centres	E, Mi, C, ACAT	1
Skills		
Recognise the burns patient who has an airway at risk and needs early intubation	Mi, C	1
To relieve pain effectively and promptly	Mi, C, D	1
To be able to undertake escharotomy of the chest and limbs when needed	Mi, C, D	1
To be able to manage minor burns	Mi, C, D	1
Behaviour		
To identify those patients that need referral to a specialist centre	Mi, C	2

C3AP2a Traumatic limb and joint injuries - Lower limb

The trainee will be able to evaluate the patient who presents with a traumatic limb or joint injury, to produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Fractures of the neck of femur, femur, supra-condylar, tibia and fibula, tibial plateau, ankle, calcaneal, metatarsal and phalanges	E, Mi, C, ACAT	1
Dislocation - hip including prosthetic , patella	E, Mi, C, ACAT	1
Musculotendinous injuries: gastrocnemius tears, quadriceps and patellar tendon rupture, meniscal and ligamentous injury to knee and ankle, Achilles tendon rupture	E, Mi, C, ACAT	1
Vascular: compartment syndrome	E, Mi, C, ACAT	1
Skills		
Know how to prescribe safely for traumatic limb pain	C, D	1
Be able to demonstrate assessment of limb function	Mi, C, D	1
Detect neurological and vascular compromise	Mi, C, D	1
Demonstrate common techniques for joint and fracture reduction, specifically reduction of dislocated ankle	Mi, C, D	1
Be able to splint and plaster injured limbs safely	Mi, C, D	1
Behaviour		
Know when to seek senior advice in the management of limb and joint trauma	Mi, C	1, 2
Ensure appropriate follow-up, including physiotherapy	Mi, C	1, 2

C3AP2b Traumatic limb and joint injuries - Upper limb

The trainee will be able to evaluate the patient who presents with a traumatic limb or joint injury, to produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Be able to recognise, including plain radiology appearances, and initiate treatment for fracture of: <ul style="list-style-type: none"> ▪ clavicle ▪ humerus ▪ radius and ulnar ▪ supracondylar ▪ radial head ▪ olecranon ▪ distal radius and ulna ▪ scaphoid ▪ metacarpals ▪ phalanges 	E, Mi, C, ACAT	1
Dislocations of the: <ul style="list-style-type: none"> ▪ AC joint ▪ shoulder ▪ elbow ▪ Pulled elbow ▪ lunate and perilunate ▪ finger 	E, Mi, C, ACAT	1
Musculotendinous injuries: rotator cuff, biceps, tendon injuries of the hand	E, Mi, C, ACAT	1
Infection - paronychia, pulp space, flexor sheath	E, Mi, C, ACAT	
Skills		
Be able to examine each joint	E, Mi, C, D	1
Be able to demonstrate assessment of limb function, detect neurological and vascular compromise	E, Mi, C, D	1

Be able to demonstrate the common techniques for joint and fracture reduction, specifically reduction of dislocated shoulder, reduction of Colles' fracture	E, Mi, C, D	1
Be able to splint and plaster injured limbs safely	E, Mi, C, D	
Behaviour		
Know when to seek senior advice in the management of limb and joint trauma	Mi, C	2
Ensure appropriate follow-up including physiotherapy	Mi, C	1

C3AP3 ABGs - Interpretation of abnormal blood gas results in the Emergency

Department

The trainee will be able to evaluate the blood gas results of critically ill patients in the resuscitation room, identifying the abnormalities and producing a valid differential diagnosis		
Knowledge	Assessment Methods	GMP Domains
Be able to interpret blood gas results establishing if acidotic, alkalotic, and the underlying metabolic / respiratory disturbance	E, Mi, C, ACAT	1
Produce a differential diagnosis for each disturbance	E, Mi, C, ACAT	1
Know the causes of acidosis with both normal and raised anion gap	E, Mi, C, ACAT	1
Understand the significance of lactic acidosis in the critically ill patient	E, Mi, C, ACAT	1
Be able to interpret blood gases to assess effectiveness of ventilation	E, Mi, C, ACAT	1
Skills		
Be able to place an arterial line	D	1
To be able to take an arterial blood gas from an arterial line aseptically	D	1
Behaviour		
Establish the abnormality, suggest treatment and ensure repeat blood gas taken to assess response	Mi, C	2

C3AP4 Abnormal blood glucose

The trainee will be able to evaluate the patient who presents with hypo and hyperglycaemia, correct and establish underlying cause. Produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know in detail the presentation and management of diabetic ketoacidosis, hyperosmolar non-ketotic coma and hypoglycaemia	E, ACAT, AA, C, Mi	1
Be able to investigate for and identify precipitating causes	E, ACAT, AA, C, Mi	
Skills		
Administers intravenous glucose and glucagon safely and rapidly to reverse hypoglycaemia	Mi, C, D	1
Prescribes intravenous fluids, insulin and potassium safely for the hyperglycaemic patient	Mi, C	1
Identifies those patients that will need critical care	Mi, C	1
Behaviour		
Ensures repeated assessment	Mi, C	1
Liaises with Intensive Care Medicine specialists in a timely and effective way	Mi, C	1,2,3,4

C3AP5 Dysuria

The trainee will be able to evaluate the patient who presents with dysuria and produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Be able to diagnose urinary tract infections including the correct interpretation of urinary tests, select appropriate antibiotics and identify those patients who need further investigation e.g. male with UTI	E, ACAT, AA, C, Mi	1
To be able to establish the underlying cause and search for the complications of urinary tract infections e.g. pyelonephritis	E, ACAT, AA, C, Mi	1
Skills		
Be able to take a history and conduct an examination sensitively	Mi, C	1
Ensure appropriate tests undertaken and treatment started.	Mi, C	1
Behaviour		
Ensure follow-up of all patients	Mi, C	2

C3AP6 Emergency airway care (CT3 and covers HST)

Airway care is a key skill in daily use for all Emergency Physicians. Trainees will build upon and regularly revisit the competences acquired during the first two years of the ACCS programme. They will become more experienced in the identification of patients who need intubation and predicting those with a difficult airway. They will become more knowledgeable of the impact of life-threatening conditions on rapid sequence induction techniques. Always working closely with a competent airway expert, trainees play an increasing role within the airway team.

The trainee will be able to evaluate the patient who presents with emergency airway problems, and be able to provide a patent airway working within an airway team		
Knowledge	Assessment Methods	GMP Domains
Be able to identify those patients who need intubation	E, ACAT, AA, C, Mi	1
Be able to identify the potentially difficult airway	E, ACAT, AA, C, Mi	1
Knows the pharmacology of induction agents and paralysing agents used in the resuscitation room	E, ACAT, AA, C, Mi	1
Skills		
Can initiate monitoring and preparation for RSI	Mi, C, D	1
Can intubate and use LMA	Mi, C, D, S	1
Knows the failed airway drill including LMA needle and surgical cricothyroidotomy	Mi, C, D, S	1
Knows how to maintain sedation and paralysis post intubation	Mi, C, D	1
Can use simple transport ventilators	Mi, C, D	1
Can recognise and anticipate the difficulties associated with RSI in the resuscitation room e.g. asthmatic	Mi, C	
Behaviour		
Building on ACCS training, becomes integral part of the airway team which always includes a senior competent airway practitioner	Mi, C	1,2
Maintains a log book of all airway interventions	Mi, C	1,2

C3AP7 Needlestick injury

The trainee will be able to evaluate the patient who presents with a needlestick injury and be able to start appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Be able to identify those patients who need prophylactic treatment for HIV, hepatitis B and tetanus using departmental protocols	E, ACAT, AA, C, Mi	1
Knows which tests should be undertaken from whom and when	E, ACAT, AA, C, Mi	1
Skills		
Ensure prompt care	Mi, C	1
Behaviours		
Handle issues sensitively	Mi, C	1,2
Ensure appropriate follow-up	Mi, C	1,2

C3AP8 Testicular pain

The trainee will be able to evaluate the patient who presents with acute testicular pain, produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know and be able to recognise the causes of scrotal pain including epididymo-orchitis, testicular torsion, trauma and tumour, synergistic gangrene	E, ACAT, AA, C, Mi	1
Know appropriate investigations including ultrasound	E, ACAT, AA, C, Mi	1
Know the treatments for these conditions	E, ACAT, AA, C, Mi	1
Skills		
Identify and refer those patients with testicular torsion promptly	Mi, C	1
Behaviour		
Ensure appropriate and timely treatment	Mi, C	1,2

C3AP9 Urinary retention

The trainee will be able to evaluate the patient who presents with urinary retention and produce a valid differential diagnosis, appropriate investigation and implement a management plan

Knowledge	Assessment Methods	GMP Domains
Know the causes of acute urinary retention	E, Mi, C, ACAT	1
Skills		
Be able to relieve symptoms by passage of a urethral catheter	Mi, C, D, E	1
Be able to insert a supra-pubic catheter	Mi, C, D, E	1
Behaviour		
Identify those patients that need referral for admission	Mi, C	2

3.3.7 Paediatric Emergency Medicine

Major and Acute presentations CT3 and ST4-6.

Paediatric Emergency Medicine Curriculum

Children will be seen throughout the whole of the training programme from ACCS onwards. The focus on children in the third year of training inevitably leads to some arbitrary divisions of what should be known and by when. It is important that all paediatric encounters are used to their maximum educational potential regardless of when they occur. Some of the emergency presentations listed below are rare and may occur only once or twice throughout the whole training programme.

The PEM curriculum is built on an understanding of the preceding parts of the curriculum, which is assumed. Thus, for example the principles of wound management should already be known and are the same regardless of age.

Paediatrics continues throughout the whole of training and although it is indicated that additional areas should be covered in ST4-6, all the areas previously specified will be seen repeatedly and this provides the opportunity for the trainee to become more experienced and expert—dealing with cases of greater complexity and acuity, becoming better at leading and coordinating resuscitation and more skilled at practical procedures (spiral learning).

Inevitably in a symptom-based curriculum a particular condition may appear in many guises and it is not possible to list all the causes of a particular presentation. However, we have indicated the most important and often indicated the same condition under different presentations.

Emergency Physicians treating children need to:

- Be able to interact with children of different stages of development to elicit the history and undertake a careful, sensitive and flexible examination
- Be aware of the different developmental stages of children and their assessment
- Acquire the special skills needed for children – e.g. airway management, vascular access
- Know that the interpretation of tests is age dependant e.g. ECG, radiology, FBC
- Be aware that paediatric life-threatening emergencies are infrequent and therefore prior preparation is essential i.e. successful completion of APLS is needed
- Be able to prescribe safely for children
- Know that some of the presenting symptoms could be manifestations of non-accidental injury (NAI)
- Be able to identify those patients needing urgent specialist attention
- Have an understanding of which patients can be safely sent home and what follow-up they may need
- Know the immunisation schedules
- Know and respect the legal framework and ethical issues relating to children in the ED including consent and confidentiality

Curricular content

Below is a list of presenting complaints that the EM trainee will need to know how to assess and manage. These are divided into paediatric major presentations (PMP1-6), for which assessment will be mandatory and must be completed by the end of CT3. Competences of PMP may be achieved by successful completion of an Advanced Paediatric Life Support (APLS), European Paediatric Life Support (EPLS) course or a course with equivalent curricula coverage and assessments, approved by the RCEM. Mandatory assessment for the following paediatric acute presentations (PAPs) fever, abdominal pain, breathlessness, and pain, which is also required by the end of CT3.

Please refer to the assessment system in section 5.0 for detail on number and type of assessment.

Paediatric major presentations (PMPs)

PMP1 Anaphylaxis	Page 263
PMP2 Apnoea, stridor and airway obstruction	264
PMP3 Cardio-respiratory arrest	265
PMP4 Major trauma in children	267
PMP5 The shocked child	270
PMP6 The unconscious child	271

Paediatric Acute Presentations

PAP1 Abdominal pain	272
PAP2 Accidental poisoning, poisoning and self-harm	273
PAP3 Acute life-threatening event (ALTE)	274
PAP4 Blood disorders	275
PAP5 Breathing difficulties - recognise the critically ill and those who will need intubation and ventilation	276
PAP6 Concerning presentations	277
PAP7 Dehydration secondary to diarrhoea and vomiting	281
PAP8 ENT	282
PAP9 Fever in all age groups	283
PAP10 Floppy child	285
PAP11 Gastro-intestinal bleeding	286
PAP12 Headache	287
PAP13 Neonatal presentations	289
PAP14 Ophthalmology	290
PAP15 Pain in children	291
PAP16 Painful limbs – atraumatic	292
PAP17 Painful limbs- traumatic	293
PAP18 Rashes in children	295
PAP19 Sore throat	296

PMP1 Anaphylaxis

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	Understand presentation and management of anaphylaxis in children		E, ACAT, AA, C, Mi, L	1
Skills	Be able to institute appropriate management for anaphylaxis (APLS guideline) Know when to ask for help		E, ACAT, AA, C, Mi, D, L	1.3

PMP2 Apnoea, stridor and airway obstruction

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Know the infective, allergic and obstructive causes of airway obstruction in children including epiglottitis and post-tonsillectomy bleeding</p> <p>Know the indications and contraindications for a surgical airway</p> <p>Know the age appropriate algorithms for obstructed airway including choking</p> <p>Know how to assess, establish and maintain a patent airway in a child</p>		E, ACAT, AA, C, Mi	1
Skills	<p>Be able to recognise signs of airway obstruction</p> <p>Be able to perform the basic and advanced life support manoeuvres for the choking child</p> <p>Call for senior help when appropriate</p>	Be able to perform a surgical airway in children (Simulation for surgical airway)	D, E, ACAT, AA, C, Mi, L, S	1, 3

PMP3 Cardio-respiratory arrest

	CT3	ST 4-6	Assessment methods	GMP Domains
Knowledge	<p>Understand the causes of cardiac arrest in children, recognising respiratory and circulatory failure are the commonest precipitants but including drowning, electrocution and hypothermia</p> <p>Understand the prognostic factors influencing the outcome of cardiac arrest in children</p> <p>Know the APLS/EPLS/NLS guidelines</p> <p>Understand the pharmacology, indications and contraindications, dose calculation and routes of administration of drugs used in resuscitation and in the stabilisation of children in cardiac arrest</p> <p>Know when to cease resuscitation</p> <p>Understand the appropriate management of sudden death in infancy and the local management guidelines for supporting the family</p>	<p>Be able to resuscitate the new born</p> <p>It is recommended that trainees know the content of and have successfully completed a neonatal life support course</p>	E, ACAT, AA, C, Mi	1
Skills	<p>Be able to establish and maintain a patent airway using basic airway manoeuvres and adjuncts and ventilate using BVM</p> <p>Be able to intubate</p> <p>Be able to lead a resuscitation team</p> <p>Be able to obtain peripheral venous, arterial and intra-osseous access</p>	<p>Be able to participate with the paediatrician in the management of sudden death in infancy understanding investigations, procedures and care of the parents</p> <p>To be able to lead and coordinate a</p>	E, ACAT, AA, C, Mi D, L	1, 3

	Be able to institute re-warming techniques in the hypothermic patient	paediatric cardiac arrest (resuscitation)		
--	---	---	--	--

PMP4 Major trauma in children

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Understand and apply the principles of ATLS/APLS to paediatric trauma management</p> <p>Head injury</p> <p>Understand the pathophysiology and clinical signs of severe head injury and when neurosurgical involvement is needed</p> <p>Understand the NICE guidelines</p> <p>Chest injury</p> <p>Know the likely chest injuries through the different age groups including pulmonary contusion and flail chest</p> <p>Abdominal injury</p> <p>Understand the common types of injury, their clinical detection and investigation</p> <p>Spinal injury</p> <p>Understand the mechanisms and risk of spinal injury in children</p> <p>Be aware of SCIWORA</p> <p>Understand the pathophysiology and signs of neurogenic shock</p> <p>Burns</p> <p>Be able to calculate the % burn surface area for children and fluid requirements</p> <p>Recognise depth of burn, specific areas e.g. face</p>	<p>More complex presentations with greater instability and in young children.</p>	<p>E, ACAT, AA, C, Mi</p>	<p>1, 2</p>

	<p>and who needs specialist referral</p> <p>Recognise burns as presentation of possible NAI</p> <p>Pelvic fractures</p> <p>Understand the common fracture patterns</p> <p>Physical Abuse</p> <p>Understand how to recognise signs of physical abuse and how to proceed with local safeguarding children protocols</p>			
Skills	<p>To recognise those patients who need intubation</p> <p>Be able to assess the level of consciousness in a child using AVPU, GCS</p> <p>Be able to request appropriate imaging as per national guidelines</p> <p>Be able to initiate management of children with scalp wounds</p> <p>Be able to manage the anxious immobilised child</p> <p>Be able to examine the spine and apply the indications for being able to 'clear' the spine</p> <p>Be able to interpret paediatric spinal xrays and their common abnormalities</p> <p>Be able to recognise possible patterns of NAI in burns injury and make appropriate referral</p>	<p>To be able to lead and coordinate a paediatric trauma resuscitation</p> <p>To be able to perform pericardiocentesis (by simulation)</p>	E, ACAT, AA, C, Mi D, L, S	1, 3

	<p>Be able to splint the pelvis during the primary survey</p> <p>Be able to treat pneumo- and haemothoraces</p> <p>Be able to recognise the non-responder to fluid therapy and need for urgent surgical attendance</p>			
--	--	--	--	--

PMP5 The shocked child

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Be able to recognise the child in shock and formulate a differential diagnosis</p> <p>Understand the pathophysiology, classification and management of septic shock</p>	Become more expert in achieving diagnosis	E, ACAT, AA, C, Mi	1
Skills	Be able to recognise and initiate treatment of the septic child as per national guidelines		E, ACAT, AA, C, Mi, D, L	1, 3

PMP6 The unconscious child

	CT3			ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Seizures including status epilepticus in children</p> <p>Know the differential diagnosis of seizures including febrile convulsions</p>	<p>Hypoglycaemia Understand the causes, presentations, complications, investigations and emergency treatment in the neonatal period and beyond</p>	<p>Diabetic ketoacidosis in children Understand local and national guidelines for the management of diabetic ketoacidosis including the principles of fluid management and insulin therapies</p>	<p>Become more expert in dealing with the unconscious child</p> <p>Understanding inborn error as a cause of hypoglycaemia and its initial investigation in the ED</p>	E, ACAT, AA, C, Mi	1
Skills	<p>Be able to recognise and treat the life-threatening complications</p> <p>Be able to institute appropriate management for status epilepticus (e.g. APLS protocol)</p>	<p>Able to reverse hypoglycaemia</p>	<p>Be able to formulate a likely diagnosis and recognise features of the presentation and complications</p> <p>Be able to recognise the features of cerebral oedema and be able to provide emergency treatment</p> <p>Be able to perform appropriate investigations and act on the results</p> <p>Be able to prescribe fluid, electrolyte and insulin therapy according to local guidelines</p>		E, ACAT, AA, C, Mi, D, LS	1, 2

Paediatric Acute Presentations (PAPs)

PAP1 Abdominal pain

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Know and recognise the causes of abdominal pain in all age groups</p> <p>Scrotal pain - understand differential diagnosis, investigation and management including those requiring surgical referral</p>	<p>Recurrent abdominal pain - understand contributing factors</p> <p>Ensure appropriate follow-up</p> <p>Constipation - identify contributing factors, initiate treatment and ensure follow - up</p>	E, ACAT, AA, C, Mi, L	1
Skills	Be able to examine and recognise the cause of acute abdominal pain		E, ACAT, AA, C, Mi, L, D	1

PAP2 Accidental poisoning, poisoning and self-harm

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Identify the major types of ingestion by age</p> <p>Understand the specific signs and symptoms of poisoning with a range of toxic agents</p> <p>Be able to investigate</p> <p>Understand the role of antidotes and charcoal</p> <p>Be able to access poisons information</p> <p>Understand the pharmacology and treatment of common poisonings</p> <p>Be aware of OD as expression of self-harm</p>	<p>How to manage the adolescent refusing treatment for a life-threatening overdose</p>	<p>E, ACAT, AA, C, Mi, L</p>	<p>1</p>
Skills	<p>Self-harm in children and adolescents</p> <p>Recognise this as an expression of distress, acute or long-term</p> <p>Recognise self-harm as indicating serious emotional distress</p> <p>Refer to the Child and Adolescent Mental Health Service team</p>		<p>E, ACAT, AA, C, Mi, L</p>	<p>1, 2, 3, 4</p>

PAP3 Acute life-threatening event (ALTE)

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Know when an infant may be seriously ill, exhibits apnoea, colour change, change in muscle tone, choking or gagging</p> <p>Know the common causes:</p> <p>Central apnoea</p> <p>Obstructive apnoea</p> <p>GO Reflux</p> <p>Arrhythmias and myocarditis</p> <p>Breath holding</p> <p>Near SIDs</p> <p>Toxins</p>		E, ACAT, AA, C, Mi, L,	1
Skills	<p>Be able to take full history and examination and initiate appropriate tests</p> <p>Arrange admission</p>		E, ACAT, AA, C, Mi, L	1, 3

PAP4 Blood disorders

	CT3		ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Sickle cell anaemia</p> <p>Anaemia</p> <p>Understand the common presentations and complications of sickle cell crises</p> <p>Provide emergency management as well as appropriate pain control and fluid balance</p> <p>Understand the presentation and causes of anaemia and ensure appropriate referral</p>	<p>Purpura and bruising in children</p> <p>Understand the causes of purpura</p> <p>Be able to recognise features in the presentation which suggest serious pathology including meningococcaemia and leukaemia</p>	<p>Leukaemia/lymphoma in children</p> <p>Understand the presentations</p>	E, ACAT, AA, C, Mi, L	1
Skills	<p>Be able to prescribe fluids and analgesia safely</p>	<p>Be able to manage life-threatening causes of purpura</p> <p>Be able to diagnose organise follow-up and explain Henoch Schönlein purpura and idiopathic thrombocytopenia</p> <p>Be able to recognise patterns suggestive of NAI and organise care</p>	<p>Be able to recognise and ensure referral</p>	E, ACAT, AA, C, Mi, L	1, 3

PAP5 Breathing difficulties - recognise the critically ill and those who will need intubation and ventilation

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Asthma in children Understand and apply the BTS guidelines for the management of asthma Understand the indications, contraindications and pharmacology of the therapies available Understand indications for intubation in severe asthma and the drugs used</p> <p>Bronchiolitis Understand the principles of management</p> <p>Pneumonia in children Understand the principles of management of community acquired pneumonia</p> <p>Pertussis Understand the age dependant presentations and indications for admission Initiate appropriate treatment of patient and contacts</p> <p>Cardiac causes Heart failure and dysrhythmias</p>		E, ACAT, AA, C, Mi, L	1, 2
Skills	<p>Recognise life-threatening asthma, and who may need intubation and ventilation</p> <p>Be able to provide BVM</p> <p>Prescribing skills</p>		E, ACAT, AA, C, Mi, L review of drug charts	1, 3

PAP6 Concerning presentations

	CT3			ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Physical abuse</p> <p>Understand the signs of physical abuse</p> <p>Understand the signs of common injury or illness that may mimic physical abuse</p> <p>Understand the common fractures seen in physical abuse</p>	<p>Sexual abuse</p> <p>Understand the ways in which children might reveal sexual abuse</p> <p>Understand and recognise the signs and symptoms of sexual abuse</p> <p>Understand the importance of seeking help from experienced colleagues in the assessment of children where NAI might be an issue</p>	<p>Neglect</p> <p>Understand the ways in which children may present with neglect</p>		E, ACAT, AA, C, Mi, L	1, 2, 3
Skills	<p>Be able to recognise patterns of injury or illness which might suggest NAI</p> <p>Be able to initiate safeguarding children procedures as per local policy</p>	<p>Be able to institute appropriate safeguarding children procedures if sexual abuse suspected</p>	<p>Be able to refer appropriately</p>		E, ACAT, AA, C, Mi, L	1, 3

Knowledge	<p>Apnoeic episodes as an infant and a presentation of NAI/factitious or induced injury</p> <p>Be aware of this as a possible presentation of imposed airway obstruction and know the indicators that this may be the case</p> <p>Understand the life-threatening nature of imposed airway obstruction</p>	<p>Best Practice</p> <p>Know the relevant national documents which underpin the safeguarding children policy in the emergency setting</p>	<p>Legal framework</p> <p>Understands consent, capacity to take decisions, and confidentiality in relation to children, and is aware of the issues of parental responsibility</p>		<p>E, ACAT, AA, C, Mi, L,</p>	<p>1, 2,</p>
Skills	<p>Refer to an experienced colleague for help</p>	<p>Ability to translate recommendations into appropriate actions on a case by case basis and follow local guidelines</p>	<p>Can engage children appropriately in their own decisions and protects the best interests of the child at all times</p>		<p>E, ACAT, AA, C, Mi, L,</p>	<p>1, 3</p>

<p>Knowledge</p>	<p>Safeguarding children and welfare systems outside of hospitals</p> <p>To have a basic understanding of the roles of other systems in protecting children, e.g. Social Services, the Child Protection Plan, Police Child Protection and Domestic Violence Units, SureStart, Childline, Health Visitors, School Nurses, Area safeguarding children Committee, Community Paediatricians</p>	<p>Categorisation of safeguarding children and welfare issues</p> <p>Understand the types of issues and terminology to describe these issues, e.g. physical/sexual/emotional and neglect or induced illness (FII), looked-after children, children with special needs or learning difficulties</p>	<p>Ability to identify children in need</p> <p>Know the range of conditions presenting as a symptom of NAI or psychological distress, e.g. deliberate self harm, aggression or risk-taking behaviour, recurrent abdominal pain, headaches or faints, recurrent attendances in young children</p>		<p>E, ACAT, AA, C, Mi, L</p>	<p>1, 2</p>
<p>Skills</p>	<p>To respect the roles of these other agencies and use them appropriately</p> <p>To be aware of local agencies available, including the voluntary sector (e.g. drug and alcohol support)</p>	<p>Accurately identify such problems in children at risk and be able to convey concerns to others</p>	<p>Reliably picks up clues which should give rise to concern</p> <p>Refers concerns on in all cases</p>		<p>E, ACAT, AA, C, Mi, L,</p>	<p>1, 2, 3</p>

Knowledge	Documentation of concerns Knows national guidance on how much documentation is required	Infants at risk Know which infants are most at risk	Toddlers Have a basic understanding of common problems e.g. toddler tantrums, food refusal		E, ACAT, AA, C, Mi, L,	1, 2
Skills	Reliably documents concerns, conversations with other professionals, and detailed descriptions of history or examination findings as appropriate.	Can identify such infants in the emergency setting, e.g. excessive crying, infants with fractures, social circumstances which increase risk	Refers problems back to the primary care team appropriately		E, ACAT, AA, C, Mi, L	1, 3
Knowledge	Schooling To have an awareness of the effect of bullying, truancy, and work pressure upon children				E, ACAT, AA, C, Mi, L	1
Skills	Reports concerns to the school or school nurse, and involves parents where appropriate				E, ACAT, AA, C, Mi, L APLS/EPLS,	1, 3

PAP7 Dehydration secondary to diarrhoea and vomiting

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Know the aetiology, pathophysiology and presentation of dehydration</p> <p>Be able to recognise the life-threatening complications of dehydration</p>	<p>Pyloric stenosis</p> <p>Understanding of the presentation, investigation and treatment of life-threatening electrolyte disturbances</p>	E, ACAT, AA, C, Mi, L,	1
Skills	<p>Be able to calculate and prescribe fluid replacement, maintenance fluids and replacement for ongoing losses as per APLS</p>		E, ACAT, AA, C, Mi, L	1, 2

PAP8 ENT

	CT3			ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Traumatic ear conditions in children</p> <p>Be aware of the possibility of NAI in cases of ear trauma</p>	<p>Earache or discharge in children</p> <p>Understand the presentation of otitis media and glue ear and their association with hearing loss in children</p>	<p>Painful noses</p> <p>Identify FBs</p> <p>Identify fractured nose, septal haematoma</p>		E, ACAT, AA, C, Mi, L	1
Skills	<p>Be able to remove foreign bodies in the ear canal or pinna</p> <p>Be able to recognise a haematoma requiring surgical drainage</p>	<p>Be able to perform otoscopy correctly</p> <p>Be able to identify otitis externa and otitis media and treat them appropriately</p>	<p>Recognise that language delay or attention deficit requires onward referral</p>		E, ACAT, AA, C, Mi, L	1, 3

PAP9 Fever in all age groups

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Be able to take a comprehensive history and examination of a feverish child. Know of national guidelines for the management of fever in children</p> <p>To identify possible causes</p> <p>Urinary tract infections</p> <p>Understand the presentation aetiology and management of UTI in the acute setting for different age groups</p> <p>Understand the range and accuracy of the different methods of urine collection</p> <p>Be able to interpret microbiological findings and institute appropriate treatment</p> <p>Understand need for and types of further investigation</p> <p>Meningitis/encephalitis</p> <p>Understand the bacterial and viral aetiologies for all age groups and the appropriate antimicrobial/antiviral treatment</p> <p>Be able to recognise and institute treatment for life-threatening complications including raised intracranial pressure</p> <p>Understand and recognise the presentation, signs and management of Kawasaki disease</p>	<p>Becoming more expertise with presentations</p> <p>Knowing which children can be safely sent home</p>	E, ACAT, AA, C, Mi	1

	<p>When no focus found</p> <p>Understand the implications for the different age groups</p>			
Skills	<p>Prescribing skills for antipyretics and antibiotics</p> <p>Be able to collect blood cultures, perform SPA and LP</p> <p>Knowing when to admit and ask for help</p>		<p>E, ACAT, AA, C, Mi, D, L</p>	<p>1, 2, 3</p>

PAP10 Floppy child

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	Understand the differential diagnosis of presentation of a child who is floppy		E, ACAT, AA, C, Mi, L	1
Skills	Being able to recognise and treat life-threatening conditions		E, ACAT, AA, C, Mi, L	1

PAP11 Gastro-intestinal bleeding

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	Understand the causes of upper and lower GI bleeding, recognising life-threatening causes including intussusception		E, ACAT, AA, C, Mi, L	1
Skills	<p>Be able to stabilize the hemodynamically compromised patient including use of intraosseous and central access</p> <p>Be able to identify appropriately the need for investigations including endoscopy, blood transfusion and surgical referral</p>		E, ACAT, AA, C, Mi, L, D	1, 3

PAP12 Headache

	CT3		ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Meningitis/encephalitis in children</p> <p>Understand the bacterial and viral aetiologies for all age groups and the appropriate antimicrobial / antiviral treatment</p>	<p>Headaches in children</p> <p>Know the causes and differential diagnosis in children</p>		E, ACAT, AA, C, Mi, L	1
Skills	<p>Be able to recognise and institute treatment for life-threatening complications, including raised intracranial pressure</p>	<p>Initiate investigation and management</p>		E, ACAT, AA, C, Mi, L	1

PAP13 Neonatal presentations

	CT3	ST4-6			Assessment Methods	GMP Domains
Knowledge	<p>Delivery* and resuscitation of the newborn</p> <p>To have the knowledge and skills to be able to assess and manage neonates presenting to the ED. Be able to formulate a differential diagnosis for a variety of common presenting symptoms. Be able to lead a resuscitation team as per APLS / EPLS / NLS guidelines</p> <p>To understand the pathophysiological processes leading to neonatal cardio-pulmonary instability, including the role of thermoregulation. Be able to identify neonates requiring admission, midwife or health visitor input and identify mothers requiring</p>	<p>Neonatal sepsis</p> <p>Know symptoms and signs of sepsis in children e.g. hypothermia, apnoea</p> <p>Understand the importance of timely treatment and the range of treatments for likely pathogens</p>	<p>Cyanotic/ non-cyanotic congenital heart disease</p> <p>Importance and relevance of duct dependant heart disease</p>	<p>Jaundice</p> <p>Understand the causes and investigation of neonatal jaundice</p>	E, ACAT, AA, C, Mi, L	1

	additional support. Recognise the healthy neonate.					
Skills	Delivery* and resuscitation skills	Undertake resuscitation and appropriate investigations	Be able to identify those neonates requiring urgent specialist opinion	Recognise jaundice and liaise with specialist	E, ACAT, AA, C, Mi, L, D	1, 3

*Delivery - see JRCALC guideline "birth imminent - normal delivery/delivery complications"

PAP14 Ophthalmology

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	Orbital cellulitis		E, ACAT, AA, C, Mi, L	1
Skills	Be able to test for visual acuity		E, ACAT, AA, C, Mi, L, D	1, 3

PAP15 Pain in children

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Know how to assess pain in children</p> <p>Know the range of options to relieve pain – non-pharmacological and pharmacological - agents, routes of administration, dosage</p> <p>Know how to select best option. Know the safe doses, side effects and toxicity of different agents</p> <p>Know principles of how to safely sedate using ketamine including use of sedation check lists, management of complications including laryngospasm and discharge instructions</p>	<p>Become more expert in the use of all analgesics in children especially ketamine</p>	<p>E, ACAT, AA, C, Mi, L</p>	<p>1</p>
Skills	<p>Be able to prescribe and safely deliver nasal diamorphine, intravenous opiates, local anaesthetic blocks, oral analgesics and entonox</p>		<p>E, ACAT, AA, C, Mi, L, D</p>	<p>1, 3</p>

PAP16 Painful limbs – atraumatic

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Be aware of rheumatological, infectious, malignant and non-accidental causes of musculoskeletal presentations</p> <p>Limping child</p> <p>Be able to examine gait, posture and hip joints of all age groups</p> <p>Understand the differential diagnosis of limp</p> <p>Septic arthritis</p> <p>Be able to suspect this in different age groups</p>	Non-traumatic back pain	E, ACAT, AA, C, Mi, L	1
Skills	<p>Be able order the correct blood tests</p> <p>Be able to order the correct imaging</p> <p>Know when to refer for specialist opinion</p>		E, ACAT, AA, C, Mi, L	1,3

PAP17 Painful limbs- traumatic

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Understand the likely types of soft tissue and bony injuries for each age group</p> <p>Be able to judge if these relate appropriately to the stated mechanism of injury</p> <p>Be aware of rheumatological, infectious, malignant and non-accidental causes of musculoskeletal presentations</p> <p>Be able to examine a child in a way which localises the injury</p> <p>Understand the Salter-Harris classification of epiphyseal injuries</p> <p>Understand the likely time-frame for recovery in children</p> <p>Know the common fractures and injuries, specifically:</p> <p>Hand injuries including nail bed injuries</p> <p>Distal radius and scaphoid fractures</p> <p>Dislocated shoulder</p> <p>Supracondylar fracture of the elbow and be able to identify those with neurovascular problems</p> <p>Pulled elbow - be able to reduce</p> <p>Forearm fracture dislocations</p> <p>Fractured femur and be able to perform femoral nerve block and splintage</p> <p>Toddler's fracture</p> <p>Compartment syndrome</p> <p>Patellar dislocation</p> <p>Amputation and preservation of tissue</p>		E, ACAT, AA, C, Mi, L	1
	<p>Be able to examine the joints</p> <p>Be able to check for neurovascular compromise</p> <p>Be able to reduce a dislocation</p>		E, ACAT, AA, C, Mi, L	1, 3

	Be able to recognise which fractures need an orthopaedic opinion and those that cannot be treated in the ED			
--	---	--	--	--

PAP18 Rashes in children

	CT3		ST4 -6	Assessment Methods	GMP Domain s
Knowledge	<p>Eczema and seborrheic dermatitis</p> <p>Understand the common treatments for eczema and reasons for treatment failure</p>	<p>Bites and infestations</p> <p>Understand the aetiology by age and the pathophysiology of bites and infestations</p> <p>Understand and recognise the signs and symptoms of bites and infestations</p>		E, ACAT, AA, C, Mi, L	1
Skills	<p>Be able to manage eczema and seborrheic dermatitis</p> <p>Be able to advise patients and families about disease process and treatment</p>	<p>Be able to manage children with acute bites and infestations, including recognition of signs and symptoms of life- and limb-threatening complications</p>		E, ACAT, AA, C, Mi, L	1, 3

PAP19 Sore throat

	CT3	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Acute throat infections in children</p> <p>Be aware of life-threatening airway obstruction in epiglottitis, and how to avoid it</p> <p>Be able to identify quinsy</p> <p>Be able to manage or refer for FBs in the throat</p>		E, ACAT, AA, C, Mi, L	1
Skills	<p>Recognise the potentially life-threatening nature of post-tonsillectomy bleeding</p>		E, ACAT, AA, C, Mi, L	1

3.3.8 HST Major and Acute Presentations (HAPs) ST4-6

Trainees in ST4-6 will revisit the knowledge skills and behaviours of all those conditions already described for CT1-3 and become more expert in their diagnosis and management. Trainees will have:

1. Increasing realisation of the range of presentations, the impact of co-morbidities and age.
2. Increasing appreciation of atypical presentations especially in the elderly and immuno-compromised.
3. Recognition of apparent benign presentations that indicate possible serious pathology e.g. syncope, falls.

Trainees will be able to look after sicker patients with increasing confidence, using investigations more selectively and with more accurate interpretation. Trainees will develop more detailed differential diagnoses focusing on the life-threatening as well as the most probable diagnosis. Trainees will supervise others, being supportive but also able to detect when greater input is needed by them to ensure the safe care of the patient.

There are two new presentations within the acute presentations, HAP35 and HAP36

HST Major Presentation (HMP)

<u>HMP1 Anaphylaxis</u>	Page 299
<u>HMP2 Cardio-respiratory arrest</u>	300
<u>HMP3 Major Trauma</u>	301
<u>HMP4 Shocked patient</u>	302
<u>HMP5 Unconscious patient</u>	303

HST Acute Presentations

HAP1 Abdominal pain	Page 304
HAP2 Acute back pain	305
HAP3 Alcohol and substance abuse	306
HAP4 Anal pain and rectal bleeding	307
HAP5 Blackouts	308
HAP6 Breathlessness	309
HAP7 Bruising and spontaneous bleeding	310
HAP8 Chest pain	311
HAP9 Dental emergencies	312
HAP10 Dialysis	313
HAP11 Environmental emergencies	314
HAP12 Epistaxis	315
HAP13 Falls	316
HAP14 Fever	317
HAP15 Fits /Seizure	318
HAP16 Haematemesis and melaena	319
HAP17 Headache	320
HAP18 Joint swelling - atraumatic	321
HAP19 Limb pain and swelling - traumatic and atraumatic	322
HAP20 Major Incident management	323
HAP21 Oncology emergencies	324
HAP22 Observational Medicine	325
HAP23 Palpitations	326
HAP24 Penile conditions	327
HAP25 Poisoning	328
HAP26 Pre-hospital care	329
HAP27 Pregnancy	330
HAP28 Rash – Life-threatening rashes	331
HAP29 Research	332
HAP30 Sexual assault	334
HAP31 Sexually transmitted disease	335
HAP32 Visual loss	336
HAP33 Weakness not due to stroke	337
HAP34 Wound management	338
HAP35 Complex older patients	339
HAP36 The patient with chronic disease	340

HMP1 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 manage and organise further investigations		
Knowledge	Assessment Methods	GMP Domains
Recognises the common causes of anaphylaxis from drugs and fluids prescribed in the ED - e.g. n-acetylcysteine, gelofusin.	E, Mi, C, ACAT, ESLE	1
Recognises the modifying effect of medication on the presentation and response to therapies	E, Mi, C, ACAT, ESLE	1
Skills		
Recognises that patients should be monitored and looks for the rebound phenomenon	Mi, C, ESLE	1
Behaviour		
Ensures patient instructed in the use of the epipen and follow-up by allergy specialist	Mi, C, ESLE	2

HMP2 Cardio-respiratory arrest

The trainee will have competence in the assessment and resuscitation of the patient who has suffered a cardio-respiratory arrest		
Knowledge	Assessment Methods	GMP Domains
Demonstrates increasing knowledge of the causes and management of cardiac arrest Become increasingly familiar with rarer causes of cardiac arrest e.g. hypothermia, drug-induced, drowning, asthma	E, Mi, C, ACAT, ESLE	1
Specifically knows the management of the pregnant patient- positioning and role of peri-mortem c-section	E, Mi, C, ACAT, ESLE	1
Skills		
Can lead and manage a cardiac arrest team Is able to make sensible end-of-life decisions	Mi, C, D, L, ESLE	1
Works effectively with others (both pre-hospital and in hospital) to ensure the ongoing care of survivors - with Intensive Care Medicine	Mi, C, D, ESLE	1
Can manage the airway, ventilation, sedation and paralysis of patients with return of spontaneous circulation	Mi, C, D, ESLE	1
Can approach the issue of organ donation sensitively	Mi, C, D, ESLE	1
Behaviour		
Can break bad news effectively, handling the spectrum of possible responses	Mi, C, ESLE	1,2,3,4,2

HMP3 Major Trauma

The trainee will be able to lead a trauma team in the assessment of the trauma victim using a systematic prioritised approach, identify and treat life-threatening conditions and arrange appropriate investigations for further management		
Knowledge	Assessment Methods	GMP Domains
Understand and be able to apply the principles of hypotensive resuscitation	E, Mi, C, ACAT, ESLE	1
Be expert in the interpretation of plain radiology as it relates to trauma	E, Mi, C, ACAT, ESLE	1
Know the role of angiography	E, Mi, C, ACAT, ESLE	1
Be familiar with more problematic trauma presentations e.g. compartment syndrome in the unconscious patient, coagulopathy	E, Mi, C, ACAT, ESLE	1
Be proficient in the use of FAST	E, Mi, C, ACAT, ESLE	1
Understand trauma in pregnancy - how trauma and pregnancy impact on one another	E, Mi, C, ACAT, ESLE	1
Resuscitative thoracotomy - know the indications and contraindications	E, Mi, C, ACAT, ESLE	1
Skills		
Resuscitative thoracotomy - should be able to describe how it should be undertaken. A CCT holder who will be working in a centre without cardiothoracic expertise should acquire this skill e.g. simulation course	Mi, C, D, S, ESLE	1
Behaviour		
Be able to lead trauma teams (with varied membership) and provide clear focus and prioritisation for the resuscitation	Mi, C, ESLE	1,2,3,4

HMP4 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		
Knowledge	Assessment Methods	GMP Domains
Know the causes, initial investigation and treatment of the rarer causes of shock e.g. neurogenic, adrenal failure, tamponade	E, Mi, C, ACAT, ESLE	1
Be able to identify and initially manage the patient presenting in cardiogenic shock secondary to myocardial infarction, massive PE, aortic dissection or valve rupture.	E, Mi, C, ACAT, ESLE	1
Know the role of imaging including echo and CT	E, Mi, C, ACAT, ESLE	1
Know the indications and contraindications for thrombolysis, angioplasty and surgery	E, Mi, C, ACAT, ESLE	1
Knows the role of ultrasound in the evaluation of the shocked patient	E, Mi, C, ACAT, ESLE	1
Skills		
Increasing expertise in therapies beyond initial resuscitation e.g. vasoactive support for the patient in septic shock.	Mi, C, D, ESLE	1
Able to gain venous access in the sickest of patients including the use of intraosseous access in adults	D, S, ESLE	1
Behaviour		
Able to gain venous access in the sickest of patients	Mi, C, ESLE	2

HMP5 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		
Knowledge	Assessment Methods	GMP Domains
Knows how to identify the patient with raised ICP and the initial management within the Emergency Department	E, Mi, C, ACAT, ESLE	1
Knows how to manage the patient who presents with a blocked shunt	E, Mi, C, ACAT, ESLE	1
Skills		
Is able to identify and manage those patients with more than one cause for reduced level of consciousness e.g. alcohol plus head injury	Mi, C, ESLE	1
Be able to maintain the airway of the unconscious patient and be part of the team that undertakes intubation	Mi, C, D, ESLE	1
Behaviour		
Knows when to ask for help and able to refer patient to Intensive Care Medicine	Mi, C, ESLE	1,2, 3, 4

HST Acute Presentations (HAP)

HAP1 Abdominal pain

The trainee will be able to assess a patient presenting with abdominal pain to produce a valid differential diagnosis, investigate appropriately, and formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the atypical presentations of abdominal pain modified by age, disease or drugs	E, Mi, C, ACAT, ESLE	1
Know the medical causes of abdominal pain	E, Mi, C, ACAT, ESLE	1
Know the limitations of the physical exam and tests in determining the presence of serious causes of abdominal pain	E, Mi, C, ACAT, ESLE	1
Skills		
Be able to perform detailed assessment of the abdomen in a wide variety of patients and recognise the seriously ill or potentially seriously ill patient	Mi, C, D, ESLE	1
Be able to correctly identify the patient with a medical cause of abdominal pain	Mi, C, ESLE	1
Be able to undertake U/S for the detection of AAA	Mi, C, D, ESLE	1
Behaviour		
Ensures prompt pain relief, and effective liaison with in-patient teams	Mi, C, ESLE	2

HAP2 Acute back pain

The trainee will be able to assess a patient with a new presentation of back pain and produce a valid differential diagnosis investigate appropriately formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the life-threatening causes of back pain- AAA, aortic dissection	E, Mi, C, ACAT, ESLE	1
Know the symptoms and signs of early cauda equina syndrome	E, Mi, C, ACAT, ESLE	1
Know the indications for surgical referral and MRI scan	E, Mi, C, ACAT, ESLE	1
Know how to screen for osteoporosis and therapies for collapsed vertebrae	E, Mi, C, ACAT, ESLE	1
Skills		
Becomes more expert at the 'grey' cases	Mi, C, ESLE	1
Manages those that need multi-specialty input e.g. back pain due to spinal secondaries	Mi, C, ESLE	1
Be able to relieve back pain effectively	Mi, C, ESLE	1
Behaviour		
To act as the patient's advocate – seeking appropriate investigations, and effective pain relief with the help of in-patient teams	Mi, C, ESLE	1,2,3,4

HAP3 Alcohol and substance abuse

The trainee will be able to assess the patient with alcohol/substance abuse to produce a valid differential diagnosis, investigate appropriately, and formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the presentations of alcoholism and substance abuse as they present to the ED, how this impacts on assessment and appropriate investigations	E, Mi, C, ACAT, ESLE	1
Know interventions that can reduce alcohol consumption that can be used in the ED	E, Mi, C, ACAT, ESLE	1
Know how to manage alcohol withdrawal, prescription of vitamins	E, Mi, C, ACAT, ESLE	1
Recognise, treat and prevent Wernicke Korsakoff syndrome	E, Mi, C, ACAT, ESLE	1
Skills		
Care beyond the ED	Mi, C, ESLE	1
Recognise co-existence of psychiatric disease	Mi, C, ESLE	1
Behaviour		
Sympathetic and non-judgemental	Mi, C, ESLE	2
Knows when to refer and how to follow-up	Mi, C, ESLE	2

HAP4 Anal pain and rectal bleeding

The trainee will be able to evaluate the patient who presents with anal pain and or rectal bleeding and produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the causes of anal pain – thrombosed haemorrhoids (internal and external), anal fissure, ano-rectal abscess, pilonidal abscess and rectal prolapse	E, Mi, C, ACAT, ESLE	1
Know the causes of lower GI and rectal bleeding e.g. haemorrhoids/ fistulae, tumour, colitis	E, Mi, C, ACAT, ESLE	1
Skills		
Undertake thorough physical examination including rectal	Mi, C, D, ESLE	1
Identify those patients who need admission and those that can be managed with outpatient follow-up	Mi, C, ESLE	1
Behaviour		
Sensitive and ensures chaperone	Mi, C, ESLE	2

HAP5 Blackouts

The trainee will be able to assess a patient presenting with collapse to produce a valid differential diagnosis, investigate and formulate a management plan		
Knowledge	Assessment Methods	GMP Domains
Knows how to risk stratify the syncopal patient and the role of investigations	E, Mi, C, ACAT, ESLE	1
Know which patients to refer for further testing (beyond the ED)	E, Mi, C, ACAT, ESLE	1
Know the DVLA recommendations	E, Mi, C, ACAT, ESLE	1
Understand pacemakers and their failure	E, Mi, C, ACAT, ESLE	1
Skills		
Identify the cause of syncope focusing on the life-threatening causes	Mi, C, ESLE	1
Behaviour		
Recognise the special needs of the elderly and the need for liaison with other specialists - cardiology, neurology, care of the older patient	Mi, C, ESLE	2

HAP6 Breathlessness

The trainee will be able to assess a patient presenting with breathlessness to produce a valid differential diagnosis, investigate and formulate a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the rarer causes of breathlessness, including aspiration and tracheostomy occlusion, pleural effusion, inhalational injury from chemical and physical irritants, foreign body inhalation	E, Mi, C, ACAT, ESLE	1
Know the indications and contraindications for invasive and non-invasive ventilation (and its different types)	E, Mi, C, ACAT, ESLE	1
Know how to diagnose and manage massive PE with the aid of echo and CT	E, Mi, C, ACAT, ESLE	1
Skills		
Be able to look after seriously unwell asthmatic and COPD patients, and escalate care	Mi, C, ESLE	1
Be able to formulate an accurate prognosis to determine the level of care needed	Mi, C, ESLE	1
Be able to initiate appropriate palliative management when appropriate	Mi, C, ESLE	1
Behaviour		
Recognise and relate prognosis to patient and carers	Mi, C, ESLE	1,2,3,4
Involve other specialty teams as appropriate- ICM, cardiology, respiratory	Mi, C, ESLE	2

HAP7 Bruising and spontaneous bleeding

The trainee will be able to evaluate the patient who presents with bruising or spontaneous bleeding and produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the causes and initial investigation of those patients presenting with bruising and spontaneous bleeding. Specifically: over-anticoagulation and its reversal (in life-threatening situations)	E, Mi, C, ACAT, ESLE	1
DIC – its presentation and causes (trauma, sepsis) and initial management	E, Mi, C, ACAT, ESLE	1
Leukaemia and marrow failure and ITP	E, Mi, C, ACAT, ESLE	1
Management of haemophiliacs	E, Mi, C, ACAT, ESLE	1
Skills		
Identify these patients quickly, liaise with haematology and ensure timely initiation of therapy	Mi, C, ESLE	1
Recognise the expertise of the patient for their condition	Mi, C, ESLE	1
Behaviour		
Is able to seek advice for specialty doctor when needed	Mi, C, ESLE	1,2

HAP8 Chest pain

The trainee will be able to assess the patient with chest pain to produce a valid differential diagnosis, investigate appropriately formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Be able to risk stratify chest pain patients accurately	E, Mi, C, ACAT, ESLE	1
Understand the role of echocardiography in the patient with chest pain e.g. aortic dissection, PE, tamponade	E, Mi, C, ACAT, ESLE	1
Skills		
Be able to investigate and care for low risk patients in a clinical decision unit/observation ward	Mi, C, ESLE	1
Be able to plan further investigation as an out-patient	Mi, C, ESLE	1
Behaviour		
Is able to safely discharge with appropriate follow-up	Mi, C, ESLE	2

HAP9 Dental emergencies

The trainee will be able to evaluate the patient who presents with dental pain including dental trauma, produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the presentation of dental abscess, dental fractures, including teeth avulsion and post-extraction complications and TMJ dislocation	E, Mi, C, ACAT, ESLE	1
Skills		
Be able to replace and temporarily splint avulsed permanent teeth	Mi, C, D, ESLE	1
Identify those who require immediate referral for drainage of dental abscess	Mi, C, ESLE	1
Be able to relieve pain by the use of local anaesthetic dental block	C, D, ESLE	1
Behaviour		
Ensure appropriate follow-up	Mi, C, ESLE	2

HAP10 Dialysis

The trainee will be able to evaluate the patient who presents on dialysis who is unwell and produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the different types of dialysis and their complications	E, Mi, C, ACAT, ESLE	1
Recognition of sepsis in these patients	E, Mi, C, ACAT, ESLE	1
Indications for urgent dialysis - hyperkalaemia, pulmonary oedema, fluid overload	E, Mi, C, ACAT, ESLE	1
Know the consequences of missed dialysis	E, Mi, C, ACAT, ESLE	
Skills		
Recognise and treat life-threatening hyperkalaemia and pulmonary oedema	Mi, C, D, ESLE	1
Recognise the need to preserve fistulae and risks of catheter-related sepsis	Mi, C, ESLE	1
Behaviour		
Liaise closely with renal physicians/Intensive Care Medicine to establish if emergency dialysis needed	Mi, C, ESLE	2

HAP11 Environmental emergencies

The trainee will be able to evaluate the patient who presents with medical problems that are caused by an environmental emergency, produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
<p>Know how to recognise, investigate and provide emergency treatment for:</p> <ul style="list-style-type: none"> ▪ Heat stroke and heat exhaustion ▪ Drug-related hyperthermias ▪ Hypothermia and frost bite ▪ Electrical burns, electrocution ▪ Decompression sickness ▪ Near-drowning ▪ Radiation exposure and safety ▪ Industrial chemical incidents ▪ Bites and envenomations typical for the UK ▪ High altitude emergencies - cerebral and pulmonary oedema 	E, Mi, C, ACAT, ESLE	1
Skills		
Anticipates related complications	Mi, C, ESLE	1
Behaviours		
Able to work with a number of teams to achieve best patient care	Mi, C, ESLE	1,2

HAP12 Epistaxis

The trainee will be able to evaluate the patient who presents with severe epistaxis and be able to control bleeding and establish likely cause		
Knowledge	Assessment Methods	GMP Domains
Know the causes of epistaxis including trauma and medication	E, Mi, C, ACAT, ESLE	1
Skills		
Be able to undertake anterior nasal packing /use nasal tampon	Mi, C, D, ESLE	1
Be able to use a foley catheter to stop posterior nasal bleeding	Mi, C, D, ESLE	1
Behaviour		
Liaise with appropriate specialists	Mi, C, ESLE	2

HAP13 Falls

The trainee will be able to assess a patient with a fall and produce a valid differential diagnosis, investigate appropriately, and formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the causes of falls, and what interventions can help to reduce falls	E, Mi, C, ACAT, ESLE	1
Be able to act upon the pharmacological causes of falls	E, Mi, C, ACAT, ESLE	1
Identify those patients with potential life-threatening causes - hypovolemia, and those that will need admission	E, Mi, C, ACAT, ESLE	1
Be aware of the indications for referral to a falls clinic	E, Mi, C, ACAT, ESLE	1
Skills		
Be able to communicate on falls risk and prevention to patient and their carers	Mi, C, ESLE	1
Behaviour		
Work closely with the multi-disciplinary teams within CDUs to ensure safe discharge and follow-up.	Mi, C, ESLE	2

HAP14 Fever

The trainee will be able to assess the patient with fever to produce a valid differential diagnosis, investigate appropriately, and formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
To know the common causes of fever presenting to the ED	E, Mi, C, ACAT, ESLE	1
Be able to investigate the traveller with fever	E, Mi, C, ACAT, ESLE	1
Be able to distinguish the common non-travel related causes of fever from infectious causes. Be able to recognise the septic patient ensuring effective management within the ED, including timely antibiotics, fluids and the use of vasoactive drugs	E, Mi, C, ACAT, ESLE	1
Be able to recognise the presentation of common infectious diseases	E, Mi, C, ACAT, ESLE	1
Skills		
Seek specialist advice especially when risk of transmission of serious disease	Mi, C, ESLE	1
Behaviours		
Follow local and national guidance on notification of communicable diseases	Mi, C, AA, ESLE	2

HAP15 Fits /Seizure

The trainee will be able to assess the patient with a seizure to produce a valid differential diagnosis, investigate appropriately, and formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know which patients who have recovered from their seizure need admission and which patients to refer to first seizure clinic	E, Mi, C, ACAT, ESLE	1
Rapidly identify the patient in status epilepticus and institute prompt further treatment and consider the need for rapid sequence induction and intubation	E, Mi, C, ACAT, ESLE	
Know and recognise the complications of seizures	E, Mi, C, ACAT, ESLE	1
Skills		
Be able to prescribe anticonvulsants safely	Mi, C, ESLE	1
Escalate care when anaesthesia needed	Mi, C, ACAT, ESLE	1
Behaviour		
Provide advice of the impact of seizures on pregnancy, employment and driving	Mi, C, ESLE	2

HAP16 Haematemesis and melaena

The trainee will be able to assess the patient with haematemesis and melaena to produce a valid differential diagnosis, investigate appropriately, and formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the indications for urgent endoscopy	E, Mi, C, ACAT, ESLE	1
Know strategies to manage uncontrollable variceal bleeding in the resuscitation room - including securing of the airway and the use of Sengstaken tube	E, Mi, C, ACAT, ESLE	1
Skills		
Safely insert central line when indicated	D, ESLE	1
Recognise those patients who are critically ill and not responding to therapy and who may need immediate endoscopy /surgery	Mi, C, ESLE	1
Behaviour		
Ensure prompt referral of those patients not responding to fluids	Mi, C, ESLE	2

HAP17 Headache

The trainee will be able to assess the patient with headache to produce a valid differential diagnosis, investigate appropriately, and formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know and be able to identify patients with the less common causes of headache e.g. cluster headaches, glaucoma, headaches in patients with shunts	E, Mi, C, ACAT, ESLE	1
Identify those patients presenting with headaches secondary to malignancy, HIV	E, Mi, C, ACAT, ESLE	1
Skills		
Initiate measures to reduce ICP	Mi, C, ESLE	1
Be able to perform a diagnostic lumbar puncture	Mi, C, D, ESLE	1
Behaviour		
Provide explanations and plan future care for those with non-serious headaches	Mi, C, ESLE	2

HAP18 Joint swelling - atraumatic

The trainee will be able to assess the patient with atraumatic joint swelling to produce a valid differential diagnosis, investigate appropriately, and formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the causes of mono and polyarthropathies and their disease associations	E, Mi, C, ACAT, ESLE	1
Initiate investigations (including joint aspiration - recognising that local practice may vary as to where this occurs), serological tests and imaging	E, Mi, C, ACAT, ESLE	1
Skills		
Be able to identify those patients with potential septic arthritis, initiate investigations and prompt referral	Mi, C, ESLE	1
Be knowledgeable of the risks of rheumatological disease-modifying drugs	Mi, C, ESLE	1
Behaviour		
Knows own limitations and when to ask for help	Mi, C, ESLE	2

HAP19 Limb pain and swelling - traumatic and atraumatic

The trainee will be able to assess the patient with limb pain and swelling to produce a valid differential diagnosis, investigate appropriately, and formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Be able to differentiate the atraumatic causes of limb pain and swelling including ilio-femoral thrombosis, superficial thrombophlebitis, subclavian thrombosis	E, Mi, C, ACAT, ESLE	1
Be able to recognise critical limb ischaemia and ensure prompt referral and investigation	E, Mi, C, ACAT, ESLE	1
Recognise referred causes of limb pain and sinister causes e.g. bone secondaries, sickle cell	E, Mi, C, ACAT, ESLE	1
Bursitis and tendonitis in the upper and lower limb including ruptured biceps, Achilles tendonitis, plantar fasciitis, metatarsalgia, carpal tunnel and other entrapment neuropathies	E, Mi, C, ACAT, ESLE	1
Traumatic causes Fractures - scapular, tarsal bones and stress fractures	E, Mi, C, ACAT, ESLE	1
Dislocations - SC joint, elbow, knee, subtalar, talar, mid-tarsal, tarsometatarsal	E, Mi, C, ACAT, ESLE	1
Skills		
Ability to maintain appropriate differential diagnosis, and use of investigations	Mi, C, ESLE	1
Behaviour		
Knows own limitations and when to ask for help	Mi, C, ESLE	2

HAP20 Major Incident management

The trainee will understand the role of the Emergency Department and its staff in major incidents, to understand the planning and to be prepared for a major incident.		
Knowledge	Assessment Methods	GMP Domains
Be able to define a major incident and understand a typical major incident plan Understand the importance of triage, communication, equipment and documentation for a major incident	E, Mi, C, ACAT	1
Understand potential CBRN agents and their treatment	E, Mi, C, ACAT	1
Understand the principles of decontamination, how it is performed and by whom	E, Mi, C, ACAT	
Skills		
Be familiar with personal protective equipment and how to use it	Mi, C	1
Participate in more than one major incident exercise	Mi, C, L	1
Be able to accurately triage multiple casualties	Mi, C, L	1
Behaviour		
Be a good communicator, demonstrating leadership, flexibility and ability to work with other teams	Mi, C, ESLE	2

HAP21 Oncology emergencies

The trainee will be able to evaluate the patient who presents with medical problems caused by cancer, produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Be able to recognise the complications related to local tumour progression e.g. acute cord compression, upper airway obstruction, pericardial and pleural effusions, SVC compression syndrome, raised intracranial pressure	E, Mi, C, ACAT, ESLE	1
Be able to identify the biochemical complications of malignancy- hypercalcaemia, SIADH, adrenocortical insufficiency	E, Mi, C, ACAT, ESLE	1
Recognise the complications relating to myelosuppression - specifically neutropenic sepsis, anaemia and thrombocytopenia	E, Mi, C, ACAT, ESLE	1
Skills		
Recognise and commence emergency treatment	Mi, C, ESLE	1
Involve specialists promptly - identify patients who may benefit from further oncological treatment	Mi, C, ESLE	1
Provide pain relief	Mi, C, ESLE	1
Establish if living will, treatment plan exists	Mi, C, ESLE	1
Behaviours		
Sympathy, understanding and manage carers/family	Mi, C, ESLE	1,2,3,4

HAP22 Observational Medicine

An Emergency Physician should be expert in the care of certain patient groups beyond the first four hours, who are cared for in the Observation Ward/Clinical Decision Unit.		
Knowledge	Assessment Methods	GMP Domains
<p>Know which patients will benefit from being cared for in an observational setting:</p> <ul style="list-style-type: none"> ▪ Those who are clinically well but without a clear diagnosis – e.g. headache, abdominal pain, elderly patient who has fallen ▪ Those that have been risk stratified as low risk but require further observation and limited investigation e.g. chest pain, syncope ▪ Those patients who are recovering but not sufficiently well to be discharged e.g. post-procedure, post-ictal, post-overdose 	E, C, Mi, ACAT, ESLE	1
Requires knowledge of the typical clinical courses over the first 24 hours for a range of clinical conditions and their risk stratification	E, C, Mi, ACAT, ESLE	1
Knowledge and ability to anticipate, recognise and manage possible adverse outcomes	E, C, Mi, ACAT, ESLE	1
Knowledge of the diagnostic pathways and the range of diagnostic tests to be used and their interpretation	E, C, Mi, ACAT, ESLE	1
Skills		
Work closely with diagnostic services to achieve a timely diagnosis	Mi, C, D, ESLE	1
Work closely with multi-disciplinary teams to ensure best care e.g. the elderly and those with mental health problems	Mi, C, ESLE	1
Be able to formulate an appropriate individual management plan, based on best evidence (e.g. NICE head injury guidelines) for clinical conditions	Mi, C, D, ESLE	1
Behaviour		
Undertake ward rounds in a timely and efficient manner	ACAT, C, Mi, ESLE	3
Carefully review patients provide a diagnosis and appropriate follow-up	ACAT, C, Mi, ESLE	3, 4

HAP23 Palpitations

The trainee will be able to assess the patient with palpitations to produce a valid differential diagnosis, investigate appropriately, and formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know alternative therapies when first-line drugs fail for arrhythmias	E, Mi, C, ACAT, ESLE	1
Have knowledge of which drugs should be used long term	E, Mi, C, ACAT, ESLE	1
Be able to identify which patients need referral for further investigation including 24 hour tape	E, Mi, C, ACAT, ESLE	1
Know the rarer arrhythmias- WPW with AF, Torsades de Pointes, prolonged QT	E, Mi, C, ACAT, ESLE	1
Skills		
Is able to take an ECG and rhythm strip	Mi, C, D, ESLE	1
Behaviour		
Be able to escalate care in the deteriorating patient	Mi, C, ESLE	1,2,3,4

HAP24 Penile conditions

The trainee will be able to evaluate the patient who presents with a painful penis and produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the causes of penile pain specifically – phimosis and paraphimosis, priapism (and its associated conditions) and fracture	E, Mi, C, ACAT, ESLE	1
Know the presentation and causes of genital ulceration	E, Mi, C, ACAT, ESLE	1
Skills		
Identify those patients who need admission and those that can be managed with outpatient follow-up	Mi, C, ESLE	1
Know how to reduce paraphimosis	C, D, ESLE	1
Behaviour		
Recognise the need for urgent referral for priapism and fracture of the penis	Mi, C, ESLE	2

HAP25 Poisoning

The trainee will be able to assess the patient with poisoning to produce a valid differential diagnosis, investigate appropriately, and formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know wider range of poisoning including cyanide and organophosphate poisoning and mixed overdoses	E, Mi, C, ACAT, ESLE	1
Know the role of antidotes (see RCEM list)	E, Mi, C, ACAT, ESLE	1
Indications for liver transplantation in paracetamol poisoning	E, Mi, C, ACAT, ESLE	1
Know the principles of the relevant health legislation and common law relevant to treatment against the patient's will	E, Mi, C, ACAT, ESLE	1
Skills		
Recognise complications – poly-pharmacy, aspiration	Mi, C, ESLE	1
Be able to risk stratify patients and liaise with psychiatric services	Mi, C, ESLE	1
Behaviour		
To be able to escalate care in the deteriorating patient	Mi, C, ESLE	1,2,3,4

HAP26 Pre-hospital care

The trainee will be sufficiently familiar with pre-hospital care systems to ensure optimal patient care across the pre-hospital – emergency department interface		
Knowledge	Assessment Methods	GMP Domains
Know how the pre-hospital services are organised, understand the principles of scene safety and the role of protective clothing	E, Mi, C, ACAT, ESLE	1
Understand the delivery of patient care out of hospital, including methods of splintage and spinal immobilisation, resuscitation out of hospital (including fluid resuscitation and the indications for rapid sequence induction)	E, Mi, C, ACAT, ESLE	1
Be able to recognise the potential limitations to care delivered in the pre-hospital environment	E, Mi, C, ACAT, ESLE	1
Be familiar with the advantages and disadvantages of land and air transport	E, Mi, C, ACAT, ESLE	1
Understand how to communicate with the pre-hospital services effectively	E, Mi, C, ACAT, ESLE	1
Know how to triage multiple casualties	E, Mi, C, ACAT, ESLE	1
Skills		
Be able to work closely with pre-hospital staff providing clear and concise on-line advice	Mi, C, ESLE	1
Be able to take a handover from pre-hospital carers	Mi, C, ESLE	1
Behaviour		
Be supportive and understanding, ensuring that pre-hospital staff are treated as valued members of the Emergency Department team	Mi, C, M, ESLE	2

HAP27 Pregnancy

The trainee will be able to evaluate the patient who presents with medical problems of pregnancy and produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the presentations and initial management of these medical problems in pregnancy: pre eclampsia, HELLP, DIC, suspected PE	E, Mi, C, ACAT, ESLE	1
Skills		
Recognition of these presentations	Mi, C, ESLE	1
Safe prescribing in pregnancy	Mi, C, AA, ESLE	1
Behaviour		
Close liaison with obstetricians	Mi, C, ESLE	2
Sensitive, supportive and uses chaperone appropriately	Mi, C, ESLE	2

HAP28 Rash – Life-threatening rashes

The trainee will be able to assess the patient with a rash to produce a valid differential diagnosis, investigate appropriately, and formulate and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know how to recognise and initiate management of the erythrodermas - e.g. maintenance of temp, fluid balance, prophylactic antibiotics	E, Mi, C, ACAT, ESLE	1
Know the dermatological manifestations of other emergency presentations - meningococcaemia, drugs, anaphylaxis, transfusion reactions	E, Mi, C, ACAT, ESLE	1
Skills		
Be able to recognise these rare presentations	Mi, C, ESLE	1
Behaviour		
Liaise with specialist to ensure optimal care	Mi, C, ESLE	1,2

HAP29 Research

The trainee will be able to search and critically appraise the literature, understand relevant statistical methods and understand research designs. Trainees will be able to formulate a researchable question and be able to undertake a clinical topic review and related personal work

Knowledge	Assessment Methods	GMP Domains
<p>CT3 onwards</p> <p>Know how to critically appraise the primary literature (especially therapy, diagnostic and meta-analysis papers)</p> <p>Be able to search the common databases (Medline, EMbase, CINAHL and Cochrane Library)</p> <p>Understand hypothesis testing including type I and II errors</p> <p>Understand the common parametric & non-parametric tests and confidence intervals</p> <p>Understand RR, AR, NNT and diagnostic test descriptions (sensitivity, specificity, likelihood ratios, PPV, NPV)</p> <p>Sample size estimation and power calculation</p>	<p>Paeds CTR</p> <p>Critical Appraisal SAQ FCEM (from CT3/ST3 onwards)</p>	<p>1</p>
<p>Understand the common research designs: RCTs, cohort studies, case studies and diagnostic studies</p>	<p>E, Critical Appraisal SAQ</p>	<p>1</p>
<p>Understand the difference between statistical significance and clinical significance</p>	<p>E, Critical Appraisal SAQ</p>	<p>1</p>
<p>Be able to select the right design for the right question</p>	<p>E, Critical Appraisal SAQ</p>	<p>1</p>
<p>Understand the key characteristics of a good research question suitable for a Clinical Topic Review. Know the RCEM guidance for such a review</p> <p>Understand the principles of guideline development</p>	<p>Review of CTR work- part of ARCP yr 4&5</p>	<p>1</p>

<p>NB Those trainees with a desire to undertake research will need to:</p> <ul style="list-style-type: none"> ▪ Liaise with experienced researchers and develop their knowledge relating to hypothesis formulation, research design, ethical approval, grant application processes and the standard research paper layout ▪ Develop writing skills working with experienced authors ▪ Know the common funding sources, e.g. College, NHS R&D, MRC, and Wellcome Foundation ▪ Should seek guidance on an academic career from their local School of Emergency Medicine 		1
Skills		
Become expert at literature appraisal by practice	E, Critical Appraisal SAQ	1
Able to develop suitable topic for Clinical Topic Review by use of literature searches and refinement of original question	E, Critical Appraisal SAQ, CTR	1
Timetabling of CTR work to ensure comprehensive literature review and sufficient time to complete personal work	E, Critical Appraisal SAQ, CTR	1
Behaviour		
<p>Appreciate the importance of literature appraisal at an early stage of training and actively seeks those skills.</p> <p>Develop a topic suitable for CTR at the beginning of HST</p>	E, CTR	2

HAP30 Sexual assault

The trainee will be able to evaluate the patient who presents with a history of sexual assault and produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the need for preservation of forensic evidence from assault patients, involvement of specialists, screening for STD, provision of post-coital contraception	E, Mi, C, ACAT, ESLE	1
Skills		
Be able to recognise potential cases, previous patterns of domestic violence	Mi, C, ESLE	1
Liaise with the police appropriately	Mi, C, ESLE	1
Behaviour		
Sensitive, supportive and use of chaperone	Mi, C, ESLE	2

HAP31 Sexually transmitted disease

The trainee will be able to evaluate the patient who presents with symptoms of sexually transmitted disease - specifically genital discharge and produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the common presentations, systemic manifestations, pathogens and appropriate initial investigation of the common STDs	E, ACAT, AA, C, Mi, ESLE	1
Skills		
Ensure appropriate investigation and referral	Mi, C, ESLE	1
Behaviour		
Sensitive handling	Mi, C. PS, ESLE	2

HAP32 Visual loss

The trainee will be able to evaluate the patient who presents with sudden visual loss and produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the ocular causes of sudden visual loss - retinal haemorrhage, retinal artery and venous occlusion, vitreous haemorrhage, retinal detachment and optic neuritis	E, Mi, C, ACAT, ESLE, ESLE	1
Knowledge of the central causes of visual loss	E, Mi, C, ACAT, ESLE	1
Skills		
Identify correctly underlying pathology and ensure prompt ophthalmic referral for those patients who need admission and those that can be managed with outpatient follow-up	Mi, C, ESLE	1
Behaviour		
Knows when to ask for a specialty opinion	Mi, C, ESLE	2

HAP33 Weakness not due to stroke

The trainee will be able to evaluate the patient who presents with weakness and produce a valid differential diagnosis, appropriate investigation and implement a management plan		
Knowledge	Assessment Methods	GMP Domains
Know the presentations and initial management of myasthenia gravis, Guillain-Barré syndrome, tetanus, botulism and MS	E, Mi, C, ACAT, ESLE	1
Skills		
Recognition of rarer presentations	Mi, C, ESLE	1
Behaviour		
Liaise with appropriate specialist	Mi, C, ESLE	2

HAP34 Wound management

The trainee will be able to assess the patient with increasing complex wounds, providing analgesia, wound exploration, identification of damaged underlying structures, repair where appropriate and closure		
Knowledge	Assessment Methods	GMP Domains
Able to assess and repair more complex wounds in different locations - scalp, face, lips, ears, nail bed	E, Mi, C, ACAT, ESLE	1
Able to identify those cases needing specialist care e.g. eyelid lacerations involving the margin, tendon injuries	E, Mi, C, ACAT, ESLE	1
Skills		
Provides good anaesthesia of wounds by use of local and regional nerve blocks	Mi, C, D, S, ESLE	1
Ensures thorough skin and wound cleaning to reduce risk of infection and skin tattooing	Mi, C, D, ESLE	1
Behaviour		
Ensures follow-up, providing antibiotics appropriately	Mi, C	2

HAP35 Complex older patients

The trainee will be able to assess and manage appropriately, patients who present with complex medical and social needs or who manifest as one of the frailty syndromes		
Knowledge	Assessment Methods	GMP Domains
Appreciates common conditions may present in an unusual way in older people	E, Mi, C, ACAT, ESLE	1
Recognises the presentations of delirium and dementia and is able to discriminate between the two	E, Mi, C, ACAT, ESLE	1
Describes the requirements for altered prescribing in the elderly and recognises the effects of polypharmacy	E, Mi, C, ACAT, ESLE	1
Recognises the causes of and impact of syncope and falls on older people	E, Mi, C, ACAT, ESLE	1
Incorporates and initiates appropriate end of life care where necessary	E, Mi, C, ACAT, ESLE	1
Describes frailty syndromes and the importance comprehensive geriatric assessment and multiprofessional approaches to care	E, Mi, C, ACAT, ESLE	1
Understands the relevance of capacity and consent in the elderly particularly in the presence of cognitive impairment	E, Mi, C, ACAT, ESLE	1
Recognises presentations of abuse in older people	E, Mi, C, ACAT, ESLE	1
Skills		
Performs a comprehensive but focussed physical assessment within a limited time and in difficult circumstances	Mi, C, ESLE	1
Performs a focussed evaluation of baseline activity and performance	Mi, C, ESLE	1
Behaviour		
Provides compassionate and appropriate care – individualised for each patient, recognising their right to equitable care	Mi, C, ESLE	2
Provides calm and well paced interventions recognising the potential for disorientation and discomfort	Mi, C, ESLE	2

HAP36 The patient with chronic disease

The trainee will be able to assess and manage appropriately patients whose presentations are affected by chronic disease		
Knowledge	Assessment Methods	GMP Domains
Describes typical presentations of chronic disease in the acute setting	E, Mi, C, ACAT, ESLE	1
Appreciates that chronic disease may affect the way acute conditions present	E, Mi, C, ACAT, ESLE	1
Recognises the psychosocial effect of chronic disease on acute presentations	E, Mi, C, ACAT, ESLE	1
Describes the effect on presentation and requirements for altered prescribing in relation to pre-existing medicines, novel treatments, drug interactions, altered drug metabolism and impaired physiological reserve	E, Mi, C, ACAT, ESLE	1
Recognises the importance of symptomatic treatment	E, Mi, C, ACAT, ESLE	1
Incorporates and initiates appropriate end of life care where necessary	E, Mi, C, ACAT, ESLE	1
Skills		
Performs a comprehensive but focussed physical assessment extended to include areas relevant to the pre-existing chronic disease	Mi, C, ESLE	1
Recognises that evaluation of baseline symptoms and impact on performance is an essential part of the assessment of acute presentations	Mi, C, ESLE	1
Is able to rapidly identify relevant and reliable sources of information relating to rare chronic clinical conditions presenting to the Emergency Department	Mi, C, ESLE	1
Behaviour		
Provides compassionate and appropriate care – individualised for each patient	Mi, C, ESLE	2
Uses the patient's own knowledge of their condition to develop individualised management plan	Mi, C, ESLE	2
Communicates with relevant professionals, including GP or Hospital team, to seek advice, pass on information and ensure continuity of care	Mi, C, ESLE	2

3.3.9 Procedural Competences CT1&2, CT3-ST6

Below are listed the practical procedures in adults that the trainee would be expected to undertake during the ACCS programme (CT1-3). Those that must be assessed during the first two years by a particular specialty (and are mandatory) are indicated in the filled boxes in the table below. Those boxes that are unfilled are also important: these assessments can be undertaken in a number of different ACCS settings, using any of the WPBA tools available and that can be recorded in the e-portfolio.

All 45 procedures and related competences (which includes those listed under the Initial assessment of competence (IAC)) are to be covered by the trainee over a three year period.

Practical procedures	GIM(A)	EM	ICM	Anaesthesia
1. Arterial cannulation			D	
2. Peripheral venous cannulation			D	
3. Central venous cannulation			D	
4. Arterial blood gas sampling			Mi, D	
5. Lumbar puncture				
6. Pleural tap and aspiration				
7. Intercostal drain - Seldinger				
8. Intercostal drain - Open				
9. Ascitic tap				
10. Abdominal paracentesis				
11. Airway protection		D		
12. Basic and advanced life support				D
13. DC cardioversion				
14. Knee aspiration				

15. Temporary pacing (external/wire)				
16. Reduction of dislocation/fracture		D		
17. Large joint examination				
18. Wound management		D		
19. Trauma primary survey		D		
20. Initial assessment of the acutely unwell				
21. Secondary assessment of the acutely unwell (i.e. after initial resuscitation and in the intensive care unit)				
22. Connection to a mechanical ventilator			D	
23. Safe use of drugs to facilitate mechanical ventilation			C	
24. Managing the patient fighting the ventilator			C	
25. Monitoring respiratory function			C	
26. Deliver a fluid challenge safely to an acutely unwell patient			C	
27. Describe actions required for accidental displacement of tracheal tube or tracheostomy			C	

Mini-CEX (Mi, A) DOPs (D), CBD (C), X = more than one tool can be used

Paediatric EM Practical Procedures for CT3 and ST4-6

Below are listed the practical procedural skills that should be acquired. The acquisition of these skills is case dependant and it may be that some skills may not be acquired by the end of CT3.

The 4 indicated with M are mandatory before the end of CT3. Those indicated with M must be assessed with DOPs using the generic DOPs tool. It is not expected that trainees will be assessed for all the listed procedures below but wherever the opportunity arises the trainees should seek to be observed by a trainer and as a minimum should maintain a record of these procedures in the reflective log of the e-portfolio.

Some skills may be acquired using simulation techniques and these are indicated by (S).

CT3 PEM	ST4-6 PEM
<ul style="list-style-type: none"> • Be able to perform a paediatric primary survey M • Basic airway manoeuvres to include use of airway adjuncts, oxygen delivery techniques M • Choking child (S) • Orotracheal intubation - may have been acquired during ACCS anaesthetics (S) 	<ul style="list-style-type: none"> • Replacement of tracheostomy tube
<ul style="list-style-type: none"> • Needle thoracocentesis (S) • Tube thoracostomy (S) • Venous access M • Intraosseus line insertion (S) • Direct current electrical cardioversion defibrillation (S) 	<ul style="list-style-type: none"> • Cricothyrotomy and percutaneous trans-tracheal ventilation (S) • External cardiac pacing (S)
<ul style="list-style-type: none"> • Oro/nasogastric tube replacement 	<ul style="list-style-type: none"> • Safe sedation in children (S)
<ul style="list-style-type: none"> • Infiltration of local anaesthetic • Incision and drainage of abscesses • Incision and drainage of paronychia • Evacuation of subungual haematoma • Wound exploration and irrigation • Wound repair with glue, adhesive strips and sutures 	
Immobilisation techniques <ul style="list-style-type: none"> • Application of broad arm sling • Application of collar and cuff • Application of Thomas splint or similar • Pelvic stabilisation techniques • Spinal immobilization/log rolling 	Foreign body removal <ul style="list-style-type: none"> • Nose • Ear • In soft tissue • Eye • Ring removal

Fracture/dislocation reduction techniques	
<ul style="list-style-type: none"> • Shoulder dislocation • Elbow dislocation • Phalangeal dislocation • Supracondylar fracture with limb-threatening vascular compromise • Patellar dislocation • Ankle reduction 	
Equipment and guidelines	
<ul style="list-style-type: none"> • Must be familiar with the paediatric equipment and guidelines in the resuscitation room M 	
Plaster techniques	
<ul style="list-style-type: none"> • Backslabs/ splints • POP 	

Practical procedures for ST4-6 in adults

During HST trainees will be expected to become more expert in all the practical procedures previously undertaken and should keep records of such procedures and undertake a DOP assessment wherever possible.

HST is where the acquisition of ultrasound skills occurs and these are listed below.

It should be noted that there are a number of life-saving skills, which may be used rarely and which are not covered in this curriculum, such as resuscitative thoracotomy and peri-mortem Caesarian section. An Emergency Physician, who has completed their training and is working in an ED without the in-patient services to provide these skills, are strongly recommended to consider attending simulation courses and to liaise with their local specialist so as to agree how patients who may require such interventions will be cared for.

3.3.10 RCEM EMUS Curriculum

The curriculum and assessment system for ultrasound in EM should be delivered during HST. It is anticipated that some trainees will become familiar with the theoretical principles of ultrasound during CT3 by attending a College approved course. However, the formal assessment and examination of these skills and the theoretical principles will not be undertaken until the trainee is in HST. Most of the learning will be delivered by e-modules before the trainee proceeds to practical training and evaluation.

Record of attainment in ultrasound skills will be demonstrated in the EMUS assessment hand book, which is available from the RCEM and not in the e-portfolio.

Ultrasound physics

	ST 4-6	Assessment methods	GMP Domains
Knowledge	<p>The basic components of an ultrasound system</p> <p>Types of transducers and the production of ultrasound, with an emphasis on operator-controlled variables</p> <p>Use of ultrasound controls</p> <p>Know the frequencies used in medical ultrasound and the effect on image quality and penetration</p> <p>The interaction of ultrasound with tissue including biological effects</p> <p>Safety issues in ultrasound</p> <p>The basic principles of real time and Doppler ultrasound including colour flow and power Doppler</p> <p>The recognition and explanation of common artefacts in image recording systems</p>	C, AA, W	1
Skills	<p>Can operate the key machine controls</p> <p>Transducer changing</p> <p>Image manipulation and storage</p>	D	1
Behaviour	<p>Safe practice</p> <p>Recognises limitations of own skills</p>	E, C	2, 3

Sectional and ultrasonic anatomy

	ST4-6	Assessment Methods	GMP Domains
Knowledge	Kidneys, liver, spleen retro-peritoneal structures (aorta, IVC) recto-vesical, vesico-uterine and recto-uterine pouches Heart and pericardium Vessels: internal jugular veins, carotid arteries, femoral veins and arteries, antecubital and basilic veins	E, C, W	1
Skills	Describe and sketch key anatomy	D	1
Behaviour	Adheres to rule-in philosophy	E, C	2, 3

Pathology in relation to ultrasound

	ST4-6	Assessment Methods	GMP Domains
Knowledge	Kidneys: trauma/free fluid Liver and spleen: trauma/free fluid Retroperitoneal: presence or absence of abdominal aortic aneurysm (AAA) Vessels: vascular access Cardiac scan: trauma/pericardial tamponade, pericardial effusions, asystole	E, C, W	1
Skills	Describe and sketch key pathologies	C, D	1
Behaviour	Adheres to rule in philosophy	E, C	2, 3

Administration and governance

	ST4-6	Assessment Methods	GMP Domains
Knowledge	Image recording, storing and filing. Reporting medico-legal aspects – outlining the responsibility to practise within specific levels of competence and the requirements for training. Consent. The value and role of departmental protocols. The resource implications of ultrasound use	C, AA	1
Skills	Integrate EMUS into departmental clinical governance system	D	1
Behaviour	Adheres to rule-in philosophy	C	2, 3

Focused assessment using sonography in trauma (FAST)

	ST4-6	Assessment Methods	GMP Domains
Knowledge	Use focused ultrasound to assist in bedside emergency department decisions Four areas to scan How to position the patient Key indications Obtaining better views Understand common aortic artefacts Recognise the limitations of a scan and be able to explain these limitations to patients/carers Recognise patients requiring formal specialist sonographic assessment Incorporate ultrasound findings with the rest of the clinical assessment Appearances of pleural and pericardial fluid Appearances of fluid in Morison's pouch, spleno-renal recess, and pelvis	E, C, AA, W	1
Skills	Can obtain adequate images Can interpret accurately in the clinical setting	D	1
Behaviours	Safe practice	E, C	2, 3

	Recognises limitations of own skills Adheres to rule-in philosophy		
--	---	--	--

Assessment of the abdominal aorta competency

	ST4-6	Assessment Methods	GMP Domains
Knowledge	Use focused ultrasound to assist in bedside emergency department decisions Recognise the limitations of a scan and be able to explain these limitations to patients/carers How to position the patient Key indications Knows anatomy Understands common aortic artefacts Knows the views to obtain Can measure aortic diameter Recognises different types of aneurysm Understands when to use Knows normal limits Distinguishes aorta from IVC Can identify SMA and coeliac axis Knows leaks /bleeding cannot be seen Incorporate ultrasound findings with the rest of the clinical assessment	E, C, AA, W	1
Skills	Can obtain adequate images Can interpret accurately in the clinical setting	D	1
Behaviours	Safe practice Recognises limitations of own skills Adheres to rule-in philosophy	E, C	2, 3

Vascular access competency

	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Knows vascular anatomy</p> <p>Can locate IJV, femoral vein and basilic veins</p> <p>Can describe use of ultrasound to assist or to guide cannulation</p> <p>Understands parallelism and angle of approach</p>	E, C, AA, W	1
Skills	<p>Can obtain adequate images</p> <p>Can use sterile probe covers</p> <p>Can cannulate using ultrasound guidance</p> <p>Can avoid risk of air embolism</p> <p>Can avoid significant bleeding</p> <p>Can conduct without unnecessary discomfort to the patient</p>	D	1
Behaviours	<p>Safe practice</p> <p>Recognises limitations of own skills</p> <p>Adheres to rule-in philosophy</p>	E, C	2, 3

Echo in Life Support (ELS)

	ST4-6	Assessment Methods	GMP Domains
Knowledge	<p>Limited echocardiogram in the setting of non-shockable cardiac arrest rhythms (PEA and asystole)</p> <p>Detecting wall motion</p> <p>Knows the treatable causes of PEA (cardiac tamponade, hypovolaemia, and pulmonary embolism)</p> <p>Views used - sub-xiphoid view first, augmented by a further view - the parasternal long axis view</p>	E, C, AA, W	1

	Visualisation of the inferior vena cava (IVC) for assessment of diameter and collapsibility		
Skills	Can obtain adequate images Can interpret accurately in the clinical setting	D	1
Behaviours	Safe practice Recognises limitations of own skills Adheres to rule-in philosophy	E, C	2, 3

4. Learning and teaching

4.1 The training programme

The standard setting and quality assurance of postgraduate training is the statutory responsibility of the GMC, which devolves responsibility for the local delivery and organisation of training to other bodies. Local Education and Training Boards in England and Deaneries in Scotland, Wales and Northern Ireland oversee the work of Schools of Emergency Medicine or Specialty Training Committees or equivalent. These organisations, in collaboration with education providers, are responsible for the organisation and delivery of training.

The Emergency Medicine training will occur over a number of sites and specialties to ensure that the entire curriculum is covered. These sites must have appropriate standards of clinical governance and meet the relevant health and safety standards for clinical areas. Training placements must also comply with statutory requirements for trainee doctors. Each site must provide the necessary clinical exposure but also evidence that the required supervision and assessments can be achieved.

The GMC is responsible for the final award of the CCT/CESR-CP. The local training programme provides information indicating achievement of competences to the College and GMC via the ARCP process. This is dependant on the trainee achieving and documenting competences as set out within this curriculum

4.2 Recognition/transition arrangements for current trainees

All trainees with more than one year of training remaining until their expected CCT/CESR-CP date at implementation of this curriculum will be required to change to the new curriculum prior to their next ARCP, unless this is within 3 months of the implementation date, in which case it will be immediately after that ARCP. Judgements relating to progress through training will be based on the latest version of the curriculum, except where specifically referred to previously.

Trainees with less than one year of training time remaining until their expected CCT date are encouraged to change to the new curriculum but will be allowed to remain on the current curriculum if desired. Should the training period be extended for any reason beyond one year (including any out of programme time, maternity leave and remedial training periods) the trainee must switch to the new curriculum at the earliest possible opportunity.

4.3 Teaching and learning methods

The curriculum will be delivered through a variety of learning situations ranging from formal teaching programmes to experiential learning.

Types of learning situations:

Learning with peers

Working alongside peers, discussing cases, small group teaching and examination preparation.

Workplace based experiential learning

This is where the majority of learning takes place, with consultant-supervised care (review of patients, note keeping, initial management, investigation and referral), with progressive increase in responsibility as competence and experience is gained. Such learning can occur across the following settings:

1. The resuscitation room
2. The majors area with trolley bound patients
3. The facility for less severely ill and injured patients (normally ambulant)
4. The Observation Ward/ Clinical Decision Unit
5. The Paediatric area
6. Follow-up of patients on in-patient wards/ ICU
7. Liaison and discussion of cases with other specialists
8. Working closely with multidisciplinary teams e.g. mental health, discharge support teams
9. Ambulatory Care
10. Within management teams

Simulation

RCEM recognises that some presentations are relatively infrequent but very important (i.e. anaphylaxis) and therefore simulation may be utilised for both learning opportunities but also for the assessment of competence. In addition simulation is excellent for learning and developing common competences, and non technical skills. The use of simulation allows reflection on actual behaviours, interaction with others and safety awareness by video review and debriefing. Faculty must be trained in debriefing and trainees are expected to understand the principles of learning through simulation and to fully participate. Where simulation is used for assessment, only the person "leading" the scenario can be summatively assessed although other participants may have formative assessment and feedback recorded – both for clinical and non technical skills

Formal postgraduate teaching

The content of these sessions are determined by the local faculty and will be based on the curriculum. Trainees should also take advantage of regional, national and international meetings (opportunities are published on the RCEM website).

Suggested activities include:

1. A programme of regular teaching sessions to cohorts of trainees (local and regional) designed to cover aspects of the curriculum.
2. Case presentations
3. M&M meetings

4. Journal clubs
5. Research and audit projects
6. Lectures and small group teaching
7. Clinical skills - use of simulation and multiprofessional training.
8. Critical appraisal exercises
9. Joint specialty meetings
10. Life support courses
11. Participation in management meetings

Independent self directed learning

1. Reading, including the use of web-based materials including but not limited to the College website and RCEMLearning
2. Maintenance of personal portfolio (self-assessment, reflective writing, personal development plan)
3. Maintenance of airway log book and practical procedures
4. Audit and research projects
5. Reading journals
6. Management portfolio

RCEMLearning

RCEMLearning is the RCEM's e-learning platform. It is predicated on self-directed learning principles but it also seeks to encourage reflective thinking, collaboration and the development of communities of practice. RCEMLearning hosts a conventional Virtual Learning Environment (VLE) alongside its Free Open Access Medical Education (FOAMed) site which embraces emerging educational philosophies and learning styles.

All content on RCEMLearning is mapped to the RCEM curriculum, which enables individuals to map learning pathways; it also allows trainers to develop blended educational programmes which are directly aligned with the RCEM curriculum. Content with interactive components (i.e. anything with MCQs, SAQs etc.) generates a certificate, which records scores, comparison with gold standard answers (for SAQs) and relevant curriculum codes. Users are also able to enter reflective narrative notes in their profile to records their progress.

Formal study courses

Trainees may attend management, leadership, critical appraisal and communication courses where additional training to that provided within a training programme is identified as being required.

4.4 Research

ACCS and the academic trainee

Trainees joining the ACCS programme may wish to pursue an academic career and have the opportunity to compete for academic training posts. Academic trainees will follow the same clinical programme as ACCS trainees and will need to demonstrate the same competences, whilst at the same time gaining their research competences. If at ARCP, either the academic or clinical competences cannot be demonstrated, additional training time may need to be identified.

In parallel with clinical competences trainees will acquire skills to prepare them for research and the submission of a research or fellowship proposal, which if successful, will provide the funding that will support their research and may allow them to undertake a PhD before they enter higher specialty training. Academic training will typically involve attendance at taught courses covering such areas as critical analysis of scientific literature, information management, study design, basic statistical analysis, fraud, ethics and plagiarism, presentation skills, scientific writing and publishing skills. Trainees may have the opportunity to complete a Masters programme in research.

The three years of clinical training within the ACCS programme has to be completed by these academic trainees. The clinical component is demanding and experience has shown that trainees need all this time to gain the knowledge, skills and attitudes required and to be successful in the summative assessments. The clinical training time for these trainees should not normally be shortened.

The National Institute for Health Research and GMC have created a formal academic pathway for trainees throughout core and higher specialty training (HST). After the trainee has completed a higher research degree (MD /PhD) it is envisaged that they will obtain higher specialty training (those who were in approved Academic Clinical Fellowship posts will continue on a run through training programme, provided their objectives are met and progress is satisfactory at ARCP). During this period trainees may apply for an Academic Clinical Lectureship, which will enable them to continue to develop academically during HST.

Academic Clinical Lectureship (ACL) programmes in Emergency Medicine are currently running in Sheffield, Leicester and Manchester and hopefully will be developed in other centres in the future. ACL's have 50% of their time protected for academic training. During this time it is expected that they will develop into independent researchers by succeeding with small grant applications (such as RCEM), developing their publication track record, supervising junior colleagues in research and building collaborations, alongside obtaining a CCT in Emergency Medicine. At the end of their training it is envisaged that these trainees will obtain Clinician Scientist Fellowships or NIHR Senior Lectureships and form the next generation of Academic Emergency Physicians. If the trainee enters an ACL programme in ST4 this often means an extension of CCT to accommodate all of the training requirements. However, some trainees have entered at ST5 which has meant a shorter extension of HST but importantly the ability to continue to develop academically after obtaining a higher degree.

5. Assessment

5.1 The Assessment System

The assessment system is there to enhance learning by:

- Providing feedback, enabling trainees to receive immediate feedback, measure their own performance and identify areas for development
- Driving learning and enhance the training process by making it clear what is required of trainees and motivating them to ensure they receive suitable training and experience
- Providing robust evidence that trainees are meeting the curriculum standards during the training programme
- Ensuring trainees are acquiring competences within the domains of *Good Medical Practice*
- Assessing trainee's actual performance in the workplace
- Ensure that trainees' possess the essential underlying knowledge required for their specialty
- Informing the Annual Review of Competence Progression (ARCP), identifying any requirements for targeted or additional training where necessary and facilitating decisions regarding progression through the training programme
- Identifying trainees who should be advised to consider changes in career direction
- Using workplace based assessments and knowledge/skills-based assessments (College examinations) supported by structured feedback

Workplace based assessments (WPBAs) will take place throughout the training programme, allowing trainees to gather evidence of learning and to provide formative feedback. They provide evidence of progress, ultimately towards independent practice. Such evidence is used to support trainee development where this is needed. It is also used to ensure trainees are ready for the responsibilities that come with advancement. By providing feedback trainers are also sharing their hard won expertise, thereby providing insights that can allow trainees to surpass their current performance and, in turn, help them aspire to excellence.

5.2 Assessment blueprint

Throughout the EM curriculum the most appropriate tools for WPBA are shown in the 'Assessment Methods' column. It is not expected that all competences within each presentation will be assessed and that, where they are assessed, not every method will be used.

The College examinations use summative assessment tools that are well validated in undergraduate settings but less well validated in postgraduate professional examinations.

The following table shows how the examination system integrates with the WPBA system to provide full coverage of the wider curriculum, in addition to the previous comprehensive coverage of the clinical competences.

Table 1 –Assessment blueprint

Assessment Blueprint for the 2015 curriculum	Basic science	common clinical skills (history taking, examination)	clinical reasoning and diagnostic skills	procedural skills	"professionalism"	leadership	safety	management of the service and quality improvement	Academic skills	the doctor as educator
Part A MCEM	XXXX									
Part B MCEM	X		X							
Part C MCEM		XXX		XXX		X				
FCEM SAQ	X		X							
FCEM OSCE		XXX		XXX	X	XX				X
Critical appraisal									XXX	
Clinical topic review									XX	
Management viva								XXX		
WPBAs	X CBD	XXX miniCEX ACAT ESLE	XXX CBD ACAT ESLE	XXX DOPS ACAT	XX CBD ESLE	XX ESLE	XX CBD ESLE	X ESLE		X ESLE

5.3 Assessment methods

The following methods are used:

Examinations

The examination system is:

- MCEM Examination – Parts A, B & C
- FCEM Examination - which has the following components:
 - Clinical SAQ and OSCEs
 - Critical Appraisal SAQ
 - Management and Clinical Topic Review

Information and guidance on these exams is available at

<http://www.rcem.ac.uk/Training-Exams/Exams>

Work place based assessment (WPBA)

Purpose

The purposes of assessing trainees in the workplace is:

- To provide opportunities for observation and feedback at regular intervals throughout training (a formative purpose or 'assessment for learning').
- To identify for more detailed assessment trainees displaying delayed development of their clinical skills.
- To identify for more detailed assessment trainees displaying generic problems that are likely to be a barrier to clinical practice.

How WPBA evolves through EM training

Specialty trainees in Emergency Medicine are required to engage with a programme of workplace based assessment (WPBA). The WPBA schedule is designed to reflect the stages a trainee will pass through, from novice to independent practitioner. In early training (ACCS) assessment is presentation focussed and relatively prescriptive. This ensures the fundamental knowledge and skills underpinning emergency medical care are sound, with clear standards made explicit for trainee and trainers.

As trainees pass through training to the mid point, WPBA reflects the growing need to integrate these fundamentals with an array of non-technical skills. A range of techniques and tools are required to support the development of the rounded skill set needed for work as a Higher Specialty Trainee, with the accompanying responsibility of providing the most senior input to the ED at times. These are also required to help the training faculty decide on the suitability of the trainee to make this step.

In Higher Training, WPBA is more focussed still on detailed high-level feedback to the trainee on the range of skills and attributes needed for independent practice. The nature of WPBA evolves, therefore, through training from ensuring curriculum coverage to supporting the application of curriculum mastery to the complex and varied roles enacted by the senior ED clinician.

Early Training

WPBA in ACCS

Assessment in ACCS is unchanged from the 2010 schedule pending an intercollegiate review.

Trainees are assessed against the ACCS curriculum in each of EM, AM ICM and anaesthesia. The focus of WPBA in ACCS is the development of competencies relating to the care of individual patients presenting acutely. The majority of assessments are formative episodes, offering the opportunity for feedback, reflection, development and the pursuit of excellence.

Assessment in ACCS also includes summative episodes (see below). These are pass/fail encounters with consultant assessors. The purpose of these is to identify any problems with mastering key elements of core skills required for the safe and effective care of acutely ill or injured patients and they include clear descriptors against which trainees can be judged. Completion of ACCS indicates an EM trainee possesses the core skill-set to progress to the next stage of development. In Emergency Medicine this is development towards the complex collection of knowledge, skills and behaviours needed to ultimately lead a clinical shift in the ED.

Summative Assessment- Assessment of Performance (AoP)

Summative assessments are assessments of performance and are there to set a standard for practice that must be achieved. They are therefore pass/ fail, but can be repeated. The presentations that must be sampled in this way are clearly outlined in the ACCS curriculum and below. Both parties (trainer and trainee) need to know that the assessment is being used in this way. In order to be clear as to what is expected, detailed content has been developed for these assessments, enabling the trainer to more easily identify those areas that need improvement. This content is not intended to limit the trainer, but to provide a framework to which trainers can add additional detail. Descriptors of unsatisfactory practice have also been developed to facilitate more precise feedback. Summative assessments are to be undertaken with consultant trainers or equivalent and will be by Mini-Cex or CBD.

Transition to higher training

WPBA in ST3

Assessment in ST3 has two facets. It is the time in training when paediatric EM skills are further developed and evaluated. The WPBA schedule in PEM reflects the acquisition of a sound grounding in PEM competencies to take into HST for further refinement. In addition, assessment in ST3 focuses on supporting readiness for the next phase of training. This includes integration of the core skills gained in ACCS with a developing non-technical skill set. As the trainee develops to independence, the waypoint of entry into HST is important and fundamental, as it often includes working as the most senior clinician in the ED, at least for part of the working day. This role requires a degree of autonomy in caring for the sickest patients in the ED, and additional skills of teamwork, supervision, prioritisation, delegation, motivation and leadership.

To this end, WPBA in CT3 reflects the need to support the development of such skills. This is the start of a programme of WPBA for non-technical skills that will support the development of trainees through to independent practise.

At year-end, the training faculty supporting the trainee through ST3 will be asked to describe any concerns about readiness for HST. This faculty statement will be used, along with clinical performance, engagement with training, feedback from WPBA and the opinion of the Educational Supervisor to adjudge the suitability of a trainee to progress to HST.

Higher Training

WPBA in HST

WPBA in HST is there to support progress against the developmental milestones outlined below in Table 3. Examples are given of what is expected at each stage of development, and of concerns that would need to be addressed. Clearly these are not exhaustive and act as a prompt for a dialogue between trainee and trainers that will be informed by the engagement with the WPBA schedule.

The domains of clinical development listed are from the assessment blueprint (table 2 above). Examples of non-technical skills that relate to these aspects of workplace activity are also listed. By focussing in more depth on this non-technical skill set, the time spent between trainee and trainer is prioritised to this end. In the main, there is no longer a requirement to continue demonstrating coverage of a set list of individual presentations from the curriculum by WPBA in HST. Trainees are, however, required to continue to record curriculum coverage and may use any of the WPBA tools listed below to do so if they choose.

There is, however, a requirement in HST that trainees continue to demonstrate development in managing more complex cases in PEM, and so 'traditional' case based WPBAs are still required for this purpose. Additionally, skills in ultrasound are assessed in HST.

Table 3. Clinically aligned developmental milestones for Higher Training

Developing as an ED clinician to independence	Core knowledge and skills <i>Non-technical skills</i>	By the end of ST3	By the end of ST4	By the end of ST5	By the end of ST6	Markers of concern
Evaluate	History taking Clinical Examination Imaging USS <ul style="list-style-type: none"> • <i>Maintenance of standards</i> • <i>Gathering information</i> 	Build on ACCS PEM Injuries Trauma Can safely evaluate typical cases independently in all areas of the ED Can reliably seek help in evaluating complex cases in all areas Can use available information expertly and efficiently	Can evaluate complex cases in all areas independently in the large majority of cases Has effective strategies for evaluation when there is uncertainty in history or examination	Can evaluate any case, regardless of complexity injury, multi-trauma, paediatrics, concerning presentation in all but exceptional circumstances Can support and develop the expertise of the team in history taking and examination	Can evaluate any case, regardless of complexity injury, multi-trauma, paediatrics, concerning presentation	<ul style="list-style-type: none"> • Weaknesses in core knowledge • Misses significant cues in history • Under-developed examination technique • Inadequate knowledge or understanding of key investigation modalities • Misses key examination findings • Fails to seek help when unsure • Downplays findings that may refute a working diagnosis

Table 3. Clinically aligned developmental milestones for Higher Training cont.

Developing as an ED clinician to independence	Core knowledge and skills <i>Non-technical skills</i>	By the end of ST3	By the end of ST4	By the end of ST5	By the end of ST6	Markers of concern
Decide and treat	<p>Core clinical knowledge Procedural skills</p> <ul style="list-style-type: none"> • <i>Option Generation</i> • <i>Selecting & Communicating Options</i> • <i>Outcome review</i> 	<p>Can derive a plan of care for the majority of patients attending the ED, regardless of complexity and can seek support appropriately</p> <p>Is proficient in indications and risks of all key investigatory modalities for EM care</p> <p>Has experience of all key procedures required for ED care (ACCS procedure list completed)</p>	<p>Can derive and deliver a plan of care for complex cases in all areas independently in the large majority of cases</p> <p>Can interpret all key investigations within EM skill set and develop the team in interpreting investigations</p> <p>Can support the development of the team in decision making and the use of guidelines</p> <p>Is aware of the risks in supporting decision making of others, and has an effective approach to managing this risk.</p>	<p>Can derive and deliver a plan of care regardless of complexity in all but exceptional circumstances</p> <p>Can anticipate and act when decision making may be challenging, related to the nature of the decision making task, person making it, the context in which it is made</p>	<p>Can derive a plan of care for any patient presenting to the ED and deliver all key ED treatments</p>	<ul style="list-style-type: none"> • Weaknesses in core knowledge • Under estimates case acuity • Underdeveloped awareness of risk • Does not use available information effectively to generate options • Unsafe procedural technique

Table 3. Clinically aligned developmental milestones for Higher Training cont.

Developing as an ED clinician to independence	Core knowledge and skills <i>Non-technical skills</i>	By the end of ST3	By the end of ST4	By the end of ST5	By the end of ST6	Markers of concern
Resuscitate	<p>History taking Clinical Examination Imaging USS Procedural skills</p> <ul style="list-style-type: none"> • <i>Authority & assertiveness</i> • <i>Quality of communication</i> • <i>Option Generation</i> • <i>Selecting & Communicating</i> • <i>Options</i> • <i>Outcome review</i> <p><i>Gathering information</i> <i>Updating the team</i></p>	<p>Knows and deploys the key initial interventions consistently</p> <p>Can lead typical resuscitation cases (trauma and non-trauma) to disposal in adult and paediatric care</p> <p>Knows when to seek help for complex cases and can do so in a timely manner</p> <p>Can effectively lead a trauma team</p>	<p>Can effectively lead resuscitation through to disposal, regardless of complexity, in the large majority of cases</p> <p>Is an authoritative leader from whom others can learn</p>	<p>Leads resuscitation through to disposal regardless of complexity in all but exceptional circumstances with authority</p> <p>Retains situational awareness across more than one resuscitation and can utilise/optimize resources to provide safe care</p> <p>Be aware of the potential impact on the team of resuscitation cases and can effectively debrief and support the team after resuscitation,</p>	<p>Leads any complex resuscitation through to disposal.</p> <p>Oversees care for resuscitation cases in parallel, utilising resources optimally</p>	<ul style="list-style-type: none"> • Weaknesses in core knowledge • Doesn't know his/her limits. • Fails to recognise emergencies. • Lacks authority and /or appropriate assertiveness • Ineffective communication • Poor option generation • Unable to supervise more than one resuscitation case at a time

Table 3. Clinically aligned developmental milestones for Higher Training cont.

Developing as an ED clinician to independence	Core knowledge and skills <i>Non-technical skills</i>	By the end of ST3	By the end of ST4	By the end of ST5	By the end of ST6	Markers of concern
Work with others	<p>Core clinical and medico-legal knowledge</p> <p><i>Maintenance of Standards Supervision & Feedback Authority & assertiveness Quality of communication Option Generation Selecting & Communicating Options Outcome review Gathering information Updating the team</i></p>	<p>Able to provide support to junior medical and nursing colleagues on the majority of clinical questions and has an effective approach for those that can not be answered</p> <p>Can communicate effectively with patients, care givers and colleagues.</p>	<p>Actively supports junior medical and nursing team members including case supervision, developmental support and the provision of feedback</p> <p>Can supervise junior colleagues in new procedures</p>	<p>Considers the department as a whole and works to build team effectiveness</p>	<p>Able to provide support to the team on all clinical and medico-legal matters in the workplace.</p> <p>Can motivate and support the team, supervise any member of the team and provide high level feedback on skills and behaviours.</p> <p>Can communicate expertly with patients, care-givers, colleagues outside agencies.</p>	<ul style="list-style-type: none"> • Weaknesses in core knowledge • Ineffective verbal or written communication • Not calm and effective at times of challenge • Causes conflict

Table 3. Clinically aligned developmental milestones for Higher Training cont.

Developing as an ED clinician to independence	Core knowledge and skills <i>Non-technical skills</i>	By the end of ST3	By the end of ST4	By the end of ST5	By the end of ST6	Markers of concern
Manage the ED	<i>Maintenance of Standards Workload management Supervision & Feedback Team building Authority & assertiveness Quality of communication Option Generation Selecting & Communicating Options Outcome review Gathering information Anticipating Updating the team</i>	<p>Is aware of the need to manage workload across the ED</p> <p>Can prioritise own work at times of high through put.</p> <p>Can communicate concerns about departmental workload pressure to nursing and medical colleagues</p>	<p>Can anticipate key risks in the ED through times of high occupancy, i.e. availability of space, overall acuity of patients</p> <p>Maintains awareness of the demands on each area of the ED and the potential risks posed.</p> <p>Can delegate work to others to improve safety.</p> <p>Can communicate the need to escalate concerns about departmental workload effectively.</p>	<p>Can provide effective leadership to the ED in all but the most challenging situations</p> <p>Understands the burden of risk in the ED from acuity of patients, workforce issues and lack of patient flow.</p> <p>Can authoritatively communicate the need for allocating resources to reduce risk.</p> <p>Can allocate tasks optimally to self and others to best manage the workload.</p>	<p>Takes a lead in working for structural change in the department where existing staffing levels, clinical space, protocols or workflow practises are consistently failing to meet demand</p> <p>Can provide effective leadership to the ED, even at most challenging times.</p>	<ul style="list-style-type: none"> • Ineffective management of own workload and that of others • Poor anticipation of potential issues, eg staffing, clinical space • Unable to delegate effectively • Communicates ineffectively • Unable to effectively gather information regarding risk or demand • Retreats into own work at times of challenge

WPBA tools for ST3-6

For trainees in ST3-6 there are no summative workplace based assessments. However, there is a requirement that trainees engage with the WPBA schedule and interact with training faculty from the outset of their post. In this way the WPBA schedule can be used to its best advantage. With early interaction, the training faculty can better support trainee development across the academic year. Early interaction can also help identify concerns and a targeted approach can be built into the training year if required. Early trainee engagement with the WPBA programme will be evaluated at a quarter year educational meeting, and engagement is one factor used in deciding suitability to progress in training.

Extended Supervised Learning Event (ESLE)

In this current assessment schedule the ESLE is introduced for ST3-6. This is a tool that supports evaluation of performance over a period of observation. It is constructed to give scope for recording and providing feedback on progression to independence-in particular the development of non-technical skills. Its use encourages reflection and the formulation of an educational prescription for further focussed work and re-evaluation. It is outlined in more detail below.

Alignment to independence

To aid in providing feedback on the progression to independent practise, all WPBA e.g. Mini-cex, CBD in ST3-6 are aligned to independence, rather than notions of merit or of satisfactory performance as they are in ACCS. Recent evidence suggests that this yields better reliability and a greater spread of responses, and therefore lead to more valuable feedback.¹ This approach will be evaluated with the launch of the 2015 WPBA schedule and will be considered for early training in ACCS.

1. Weller JM, Misur M, Nicolson S, Morris J, Ure S, Crossley J, et al. Can I leave the theatre? A key to more reliable workplace-based assessment. *Br J Anaesth.* 2014;112(6):1083-91.

Highlighting concern

Assessment tools in ST3-6 also now include enquiry into areas of concern. Hitherto, WPBA responses have been aligned to merit, and concerns have had to be imputed from such a scale. In this current schedule, there is a request that trainers outline any training concerns illuminated by the encounter. These are categorised by irresponsibility, diminished capacity for self-improvement, immaturity, poor initiative, impaired relationships, and unprofessional behaviour associated with anxiety, insecurity or nervousness.

Such concerns will be shared with the educational supervisor. There is an expectation that the engagement with addressing such concerns, and progress against resultant educational recommendations will form an additional strand to the judgement about progression at year end.

5.4 Assessment tools

The RCEM utilises standard and specialty specific WPBA tools, which are made up of:

- Mini-Clinical Evaluation Exercise (Mi or Mini-CEX, in anaesthesia A or Anaes-CEX)
- Direct Observation of Procedural Skills (D or DOPS)
- Multi-Source Feedback (M or MSF)
- Case-Based Discussions (C or CbD)
- ESLE (Extended Supervised learning Episode) Tool (Ongoing pilot for ST5 trainees, new pilot for core trainees)
- Patient Survey (PS)
- Acute Care Assessment Tool (ACAT)
- Audit Assessment (AA)
- Teaching Observation (TO)

Details of these are given below and further information is available on the e-portfolio trainee section.

Multi-source feedback (M or MSF)

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

Mini-Clinical Evaluation Exercise (Mi or Mini-CEX, A or Anaes-CEX)

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

Direct Observation of Procedural Skills (D or DOPS)

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

Case-based Discussion (C or CbD)

The CbD assesses the performance of a trainee in their management of a patient to provide an indication of competence in areas such as clinical reasoning, decision-making and application of knowledge in relation to patient care. It also serves as a method to document conversations about, and presentations of, cases by trainees. The CbD should focus on a written record such as a patient's written case notes.

Extended Supervised Learning Episode (E or ESLE)

The ESLE is an extended formative episode of directly observed practise. The trainer observes and provides feedback on clinical performance and technical skills. Trainees are given extended narrative feedback and a rating of skills and behaviours against a level descriptor, in this case seniority. The rating scale is an instrument validated in the Emergency Department. These episodes yield a development plan, which is followed

through subsequent episodes. The tool is also used to highlight trainees in whom targeted assessments of clinical competences, using observational tools specific for this task.

The main purpose of this assessment in core trainees is to observe and provide feedback predominantly on clinical technical skills in the work place. Whilst the emphasis is on technical skills a proportion of the assessment will be on non technical skills. The main purpose of this episode for higher trainees is to observe and provide feedback on non-technical skills in the workplace, in domains including communication, leadership, option generation and situational awareness.

Acute Care Assessment Tool (ACAT (GIM), ACAT (EM))

The ACAT is designed to assess and facilitate feedback on a doctor's performance across a number of domains. The ACAT (GIM) is designed for use during their practice on the Acute Medical Take. Any doctor who has been responsible for the supervision of the Acute Medical Take can be the assessor for an ACAT. The ACAT (EM) is a modified version designed for use across shifts worked in the Emergency Department, and is described in greater detail in appendix 1.

Patient Survey (PS)

Patient Survey addresses issues, including behaviour of the doctor and effectiveness of the consultation, which are important to patients. It is intended to assess the trainee's performance in areas such as interpersonal skills, communication skills and professionalism by concentrating solely on their performance during one consultation. This is described in greater detail in appendix 2.

Audit Assessment Tool (AA)

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

Teaching Observation (TO)

The Teaching Observation form is designed to provide structured, formative feedback to trainees on teaching competence. The Teaching Observation can be based on any formal teaching by the trainee, which has been observed by the assessor. The process should be trainee-led (identifying appropriate teaching sessions and assessors). The assessment form for TO is available in the e-portfolio and RCEM website.

It is also acceptable to demonstrate that the curriculum has been sampled using a **reflective log**. However, this will only be permissible for sampling a percentage of the EM curriculum and will be used in conjunction with other evidence of competency achievement. Reflective log entries will be reviewed as part of the structured training report and will only be valid if they are accompanied by learning outcomes.

Assessment of Performance

Summative assessments will be used if there are concerns about fundamental elements of trainer performance. Summative assessments can only be completed using Mini-CEX or CBD WPBA's , by consultant level assessors.

Mini-CEX

In order to facilitate assessment the RCEM has:

- a. Provided descriptors for **satisfactory performance** in the Mini-CEX for the majority of areas chosen for assessment. These detailed descriptors are available in the e-portfolio and on the RCEM website.
- b. Provided descriptors of **unsatisfactory performance** that can be used in feeding back to the trainee.

Not all of the summative assessments that require a Mini-CEX evaluation have detailed descriptors.

Case Based Discussions - CbD

Case based discussions are designed to evaluate clinical reasoning and decision making based on the history, examination, investigation, provisional diagnosis and treatment of the case selected.

The CbD tool **can be used for summative assessment**. When this is the case the EM summative CbD WPBA form will need to be used, indicating satisfactory or unsatisfactory performance. The RCEM has not provided detailed descriptors of performance for each clinical topic that could be covered using CbD. Instead more generic descriptors in each competency domain have been provided and the assessor should rate the trainee as below at or above the expected level for their grade and experience and make an overall satisfactory/unsatisfactory judgement.

Summative assessments must be completed by EM consultants or equivalent for both Mini-CEX and CbDs

WPBA Schedule: ACCS CT1&2

CT1&2 assessment content and frequency is described below in detail involving 4 separate specialties. CT3 and HST content and frequency is described in detail in appendix 1 and only relates to EM.

1. Major and acute presentations that must be assessed using the EM Mini-CEX or CbD
2. Acute presentations that must be assessed using Mini-CEX or CbD (3 within first 8 weeks by Mini-CEX)
3. The remaining acute presentations that may be covered using: successful completion of e-learning modules, reflective diary entries in the e-portfolio (with clear learning outcomes), audit and teaching assessments that relate to acute presentations, or additional ACAT-EMs
4. Practical procedures, which are assessed in EM using the DOPs EM tool. These are not summative assessments although descriptors of expected performance are provided in the e-portfolio and RCEM website.

5. The 25 common competences, each of which is described by levels 1-4. Trainees should aim to reach level 2 in all areas during CT1-3. Trainees should have reached level 4 in all areas by the end of HST. Many of competences are an integral part of clinical practice and as such will be assessed concurrently with the clinical presentations and procedures assessments. Trainees should use these assessments to provide evidence that they have achieved the appropriate level. For a small number of common competences alternative evidence should be used e.g. assessments of audit and teaching, completion of courses, management portfolio, which can be used to record management & leadership competences.

The ACCS curriculum is written to closely integrate the specialties. The AM/EM and part of the ICM content are presented as 6 major presentations and 38 acute presentations. These should be covered over the typical 18/12 period allocated for AM/EM and ICM.

There are 45 items listed under practical procedures (including anaesthesia and ICM items), which should aim to be covered over the first 2 years.

The responsibility for providing the opportunity for assessments lies with all four specialties.

Given the overlap between the ACCS specialties, assessment of the same topic can occur in a variety of settings. A small number of assessments have been identified as specialty-specific and must be undertaken whilst working within that specialty. **However, this in no way restricts these assessments to that specialty, as assessments of the same topic in different settings is beneficial.**

The Mini-CEX, DOPS and CbD can be used either formatively or summatively. When used summatively this should be clearly indicated, and clear descriptors of a trainees performance are provided in the EM and anaesthetic assessment appendices 1&2.

It is expected that trainees over the first two years will have a recorded assessment for all 6 of the 'Major presentations' and at least 20 of the 38 'Acute presentations'.

It is required that work placed based assessments are in all training attachments, including all the core training elements and those in higher training.

The coverage of the major and acute presentations would normally be undertaken by AM, EM and ICM. The anaesthetic assessments are clearly centred on the anaesthesia part of the curriculum but opportunities to cover major and acute presentations whilst undergoing anaesthetic training should also be used.

At the beginning and end of each part of the rotation the trainer and their educational supervisor should review the outstanding assessments and plan how they will be covered as the setting of some assessments may vary based on local variations in practice. The trainee will need to submit themselves to assessment regularly, typically once per week, if they are to meet the minimum assessment requirements.

Table 4. ACCS CT1-2 Curriculum coverage and WPBA summary

Any specialty can assess a major or acute presentation. The identification of a presentation for assessment by a specialty simply means that specialty will undertake that assessment, but this does not limit that presentation being assessed again by another specialty. It is expected that trainees will undertake assessments throughout a post, with at least 3 assessments occurring in the first 8 weeks of each post.

The Multi-Source feedback (MSF) should be undertaken during the Emergency Medicine component of CT1.

	Major Presentations (MP) 6	Acute Presentations (AP) 38	Practical Procedures (PP)45
CT1 EM	<p>Summative</p> <p>2 of the 6 MPs will be completed in EM.</p> <ul style="list-style-type: none"> • Major trauma • Shock • Altered level of consciousness • Sepsis <p>Note – suggested that for:</p> <ul style="list-style-type: none"> • Anaphylaxis <p>in adults and children this could be covered regionally using simulation</p> <ul style="list-style-type: none"> • Cardio-respiratory arrest <p>could be covered either by ALS or sign off by anaesthesia</p>	<p>Summative</p> <p>5 of the 38 APs must be completed using Mini-CEX, CBD or ACAT and must be:</p> <ul style="list-style-type: none"> • Chest pain • Abdominal pain • Breathlessness • Mental health • Head injury <p>Three of the above should be completed within 8 weeks of commencement using Mini-CEX by consultant or equivalent.</p> <p>A further 5 acute presentations must be covered, using an ACAT-EM</p> <p>If there are concerns about performance in these clinical areas, further summative assessments will be used.</p> <ul style="list-style-type: none"> • It is also recommended during this time that trainees aim to cover an additional 10 acute 	<p>Formative</p> <p>5 of the 45 PP must be completed using DOPs</p> <p>The RCEM suggests coverage during EM of</p> <ul style="list-style-type: none"> • Airway • Primary survey • Wound care • Fracture /joint reduction. • Plus one other from the PP list not covered by another specialty

		presentations using a combination of ACATS, e-learning, reflective entries, teaching and audit assessments	
CT1 AM	<p>Summative</p> <p>2 of the 6 MPs</p>	<p>Summative</p> <ul style="list-style-type: none"> • 10 of the 38 APs using Mini-CEX, Cbd or ACAT • The 8-10 remaining AP can be covered using a combination of ACATS, e-learning, reflective entries, teaching and audit 	<p>Formative</p> <p>5 of the 45 PP</p> <p>Using DOPS</p>
CT2 ICM	<p>Summative</p> <p>2 of the 6 MPs</p> <ul style="list-style-type: none"> • Ideally sepsis should be covered in ICM • Plus any remaining MPs if not already covered 	<p>Summative</p> <p>Any AP that occurs in an ICM setting and not already covered using appropriate tool</p>	<p>Formative</p> <p>13 of the 45 PP,</p> <p>Using DOPs and other tools</p>
CT2 ANAESTHESIA	<p>Summative</p> <ul style="list-style-type: none"> • Basic and advanced life support assessment • Anaesthesia assessments including initial assessment of competence 		

During a typical 6 months in EM it will be expected that the trainee will submit themselves to:

Core Major presentations - CMP

Two of the six major presentations, which will be covered using Mini-CEX or CbD.

It is essential that all summative assessments are completed by EM consultants or equivalent e.g. an associate specialist who has completed assessment training as defined by GMC.

Trainers and trainees should note that the assessment of cardiac arrest is also part of the anaesthetic assessment regimen and could be assessed during that time. Schools may wish to explore the opportunity of using simulation to assess anaphylaxis given its low frequency.

Core Acute Presentations -CAP

The trainee should be assessed summatively using Mini-CEX or CbD for the following 5 acute presentations:

- 1 Chest pain
- 2 Abdominal pain
- 3 Breathlessness
- 4 Mental health
- 5 Head injury

Another 7 APs should be covered using ACAT-EM, Mini-CEX or CbD during the remainder of the EM post

A single ACAT can cover up to 5 APs.

It is intended that when the trainee is working in Acute Medicine, they will similarly cover 2 MPs and 10 or more acute presentations using Mini-CEX/CbD or ACAT.

During the AM and EM posts, trainees should cover the remaining 18 acute presentations (10 having been completed in EM, and 10 in AM out of total 38).

These must be completed during this period of core training by successful completion of:

- E-learning modules
- Teaching and audit assessments
- Reflective entries that had a recorded learning outcome into the e-portfolio
- Additional ACAT-EMs

Trainees at the end of their EM training should seek a summary description of the number and location of patients they have seen e.g. total number seen, number aged <16, number seen in resuscitation area, majors side, Paeds and minors. This can be either in a hard copy patient log or electronic version. This patient log will be required for the structured training report.

Practical procedures - PP

EM has agreed to undertake a minimum of 5 assessments for PP whilst the trainee is in EM in the first 2 years of training. These PPs are:

- 1 Airway maintenance
- 2 Primary survey
- 3 Wound care
- 4 Fracture/ joint manipulation
- 5 Plus one other PP from list

These assessments will be done using the EM DOPS tool but RCEM has written detailed descriptors of expected trainee performance to assist in assessment and feedback. Whilst these DOPS are not summative assessments the assessor should indicate however if the DOPS should be repeated.

If the opportunity arises, additional practical procedures may be completed in EM using the generic DOPS tool provided and available on the trainee's e-portfolio.

Common Competences - CC

Trainees should seek evidence of level 2 competence for >50% of the common competences in these first 2 years.

Completed EM WPBA assessment forms will automatically populate the common competences section in the e-portfolio. This will be reviewed during completion of the structured training report, at which time the ES will also be able to sign off additional common competences, where additional evidence exists.

WPBA Schedule: ST3 Paediatric Emergency Medicine

Curriculum content in ST3 Emergency Medicine

1. Paediatric Emergency medicine
 - a. There are 6 major presentations (PMP)
 - b. There are 19 acute presentations (PAP)
 - c. There are 3 practical procedures (PP)

The trainee will be expected to complete the following:

Major Presentations

Successful completion of APLS/EPLS can be used as a proxy assessment for the major presentations.

Trainees should also complete:

Two of the six Major Presentations using Mini-CEX or CBD with a consultant or equivalent in the workplace, one within 3 months of commencing.

Given the rarity of paediatric cardiac arrest and anaphylaxis, Schools may wish to explore the opportunity of using simulation to aid assessment.

Acute Presentations

The trainee should be assessed using Mini-CEX or CBD for the following five acute presentations with a consultant or equivalent

Two of which must be within 3 months of commencement using Mini-CEX.

1. Abdominal pain
2. Breathlessness
3. Fever
4. Child in pain
5. Concerning presentation

The remaining 14 APs should be sampled by successful completion of

ACAT-EM

Mini-CEX/CbD if the opportunity occurs

E-learning modules, FOAM ED content

Teaching and audit assessments,

Reflective entries that had a recorded learning outcome in the e-portfolio

CT3 PEM Practical procedures

The following 3 practical procedures in children should be assessed during CT3

- 1 Venous access
- 2 Airway assessment and maintenance,
- 3 Primary survey

If the opportunity arises, additional practical procedures may be completed in EM using the generic DOPs tool provided and available on the trainee's e-portfolio.

WPBA schedule: ST3 Adult Emergency Medicine

Curriculum content in ST3 Adult Emergency Medicine:

Major Trauma and seven acute presentations

WPBA from this point in training is mapped to the clinically aligned milestones in table 3.

Trainees are also required to continue sampling and recording evidence of coverage of major and acute presentations. Evidence is recorded in the e-portfolio, and can be from a number of sources, as outlined below. The WPBA listed below are a minimum. Further WPBA may provide evidence of curriculum coverage, and trainees are also encouraged to record and seek feedback on further individual cases that highlight complexity or challenge.

Six Resuscitation cases by Mini-CEX or CBD (including trauma assessment) with consultant assessors or equivalent. Three must be assessed by Mini-CEX, the first within 3 months of commencing the post.

Acute Presentations

The seven CT3 EM acute presentations may be sampled by:

ESLE

ACAT, Mini-CEX, CbD, or CBD (if the opportunity occurs)

E-learning modules or FOAM ed content

Teaching and audit assessments

Reflective entries that had a recorded learning outcome into the e-portfolio

Extended supervised Learning Episode (ESLE)

Two will be conducted in Adult Emergency Medicine, the first by 3 months. The first is to be conducted by the clinical/educational supervisor.

Practical procedures (PP)

There are no new practical procedures during CT3 EM. Trainees should ensure that they have sampled assessments for all 45 areas listed, which should ideally have been completed in the first 2 years.

Common competencies

Should have demonstrated achievement of level 2 in at least 23/25

WPBA Schedule in HST

Curriculum content in HST Emergency Medicine

In HST, trainee will need to provide evidence of curriculum coverage for

1. **33 HST Acute Presentations (HAP)**
2. **6 Paediatric Emergency Medicine Acute Presentations**

WPBA Schedule: ST4

Extended supervised Learning Episode (ESLE)

Three ESLEs will be completed, the first to be completed within 3 months of commencement, and the second within 6 months. The educational/clinical supervisor will conduct the first, and at least one other consultant or equivalent will conduct another. ESLEs will sample activity in all available areas of the ED and must include resuscitation room care.

17 acute presentations may be covered by the trainee in a variety of ways (see curriculum coverage below):

ESLE

Mini-CEX or CbD (if the opportunity arises)

Successful completion of e learning modules

Reflective diary entries in the e portfolio with clear learning outcomes

Audit and teaching assessments

ST4 Paediatric Emergency Medicine

3 complex major or acute presentations of must be assessed using either

Mini-CEX or CbD

Trainees will undertake those procedures introduced in core training repeatedly and should maintain a log of such procedures.

Ultrasound training occurs during HST and is described in the document RCEM EMUS Level 1 ultrasound.

Trainees should be working towards level 4 for the common competencies.

ST4 Ultrasound

It is recommended in ST4 that the following is covered

- Section A- trainee information, theory training and log summary
- Commence triggered assessments B-D

The EMUS assessment system is provided in appendix 7 and is also available on the RCEM web site.

WPBA schedule : ST5

Extended supervised Learning Episode (ESLE)

Three ESLEs will be completed, the first within 3 months of commencement and the second within 6 months. The educational/clinical supervisor will conduct the first, and at least one other consultant or equivalent will conduct another. ESLEs will sample activity in all available areas of the ED and must include resuscitation room care.

16 acute presentations that may be sampled by either
ESLE
Mini-CEX or CbD (If the situation arises)
Successful completion of e learning modules or FOAM ed content,
Reflective diary entries in the e portfolio with clear learning outcomes,
Audit and teaching assessments

ST5 Paediatrics

3 complex major or acute presentations must be assessed using either
Mini-CEX or CbD,

ST5 Ultrasound

Continue triggered assessments.

The EMUS assessment system is provided in appendix 7 and is also available on the RCEM web site.

WPBA schedule: ST6

During this year the trainees' focus is on the FCEM exam and no new material is introduced.

Any curricular content as yet uncovered should be completed.

Extended supervised Learning Episode ESLE

Two ESLEs will be completed. These will focus on leading the department and during these ESLEs the trainee will be supernumerary and will work alongside the consultant running the shift. The trainee will receive all the calls and enquiries the consultant would usually receive and will respond under consultant supervision.

ST6 Ultrasound

All triggered assessments and final sign off should be complete.

Common competencies

Trainees should have achieved level 4 for 95% of common competencies.

Table 5. Curriculum coverage and WPBA: ST 3-6

Trainees are required to continue collating evidence of curriculum coverage through to the end of training. The presentations that should be sampled in each year of training are summarised in (Appendix 1; Section 6 tables 6&7).

Recommendations for how WPBA can inform decisions regarding progression are outlined in section 5 of Appendix 1 to the curriculum (WPBA).

	Curriculum coverage	WPBA
CT3 PEM	<p>Major presentation</p> <ul style="list-style-type: none"> • Anaphylaxis • Major Trauma • Shocked patient • Unconscious patient • Apnoea/stridor/airway obstruction <p>Acute presentations</p> <ul style="list-style-type: none"> • Abdominal pain • Fever • Breathlessness • Child in pain • Concerning presentation 	<p>Major presentations</p> <p>These can be signed off by completion of EPLS/APLS course. In addition, 2 of the 6 MPs will be completed with a consultant assessor by mini-CEX or CBD</p> <p>Acute presentations</p> <p>Those listed should be assessed by a consultant or equivalent using CBD or Mini-cex</p>
	<p>Practical Procedures</p> <p>Venous access 2 Airway assessment and maintenance, 3.Primary survey</p>	<p>The remaining 14 APs should be sampled by successful completion of ACAT-EM Mini-CEX/CbD if the opportunity occurs E-learning modules, FOAM ED content Teaching and audit assessments, Reflective entries that had a recorded learning outcome in the e-portfolio</p>
		<p>Practical procedures</p> <p>These should be assessed using DOPS</p>
CT3 Adult EM	<p>Acute presentations</p> <p>Seven CT3 EM acute presentations that may be sampled by: ESLE ACAT, Mini-CEX, CbD, or CBD (if the opportunity occurs) E-learning modules or FOAM ed content Teaching and audit assessments Reflective entries that had a recorded learning outcome into the e-portfolio</p>	<p>6 resuscitation cases, by mini-cex or CBD, with consultant or equivalent using ST3-6 tools (aligned to independence) the first within 3 months of commencing post</p> <p>2 ESLEs (first within 3 months of commencement)</p>

ST4	<p>Acute presentations</p> <p>17 acute presentations that may be covered by the trainee in a variety of ways (see curriculum coverage below):</p> <p>ESLE Mini-CEX or CbD (if the opportunity arises) Successful completion of e learning modules or FOAM Ed content Reflective diary entries in the e portfolio with clear learning outcomes Audit and teaching assessments</p>	<p>3 ESLEs (first within 3 months of commencement)</p> <p>3 Mini-Cex/CBD for Higher Training PEM</p> <p>Ultrasound Section A- trainee information, theory training and log summary Commence triggered assessments B-D</p>
ST5	<p>Acute presentations</p> <p>16 acute presentations that may be sampled by either</p> <p>ESLE Mini-CEX or CbD (if the situation arises) Successful completion of e learning modules or FOAM ed content, Reflective diary entries in the e portfolio with clear learning outcomes, Audit and teaching assessments</p>	<p>3 ESLEs (first within 3 months of commencement)</p> <p>3 Mini-Cex/CBD for Higher Training PEM</p> <p>Ultrasound Further triggered assessment B-D</p>
ST6	<p>No new curricular coverage</p>	<p>2 ESLEs</p> <p>USS All Ultrasound assessments complete</p>

5.5 ARCP decision tools

At ARCP, a decision is made about the progress of the trainee, and in particular whether they are ready to progress to the next stage of training. This will include the engagement with WPBA, the progress against development milestones as outlined above, the opinion of the training faculty and the recommendation of the educational supervisor recorded in the structured training report (STR).

ARCP decision tools are available on the e-portfolio and the College website. These tools contain the recommended requirements for progression to the next stage of

training. It is the responsibility of the ARCP panel to assess the evidence presented by a trainee and to decide if the trainee should progress.

Note: Trainees entering the programme from the DRE-EM route will have an assessment of transferable competences made which will inform the WPBA needed during CT3 and the transitional training period in AM, ICM, Anaesthesia, EM and PEM. This assessment will form the basis of the requirements against which a trainee shall be judged at ARCP prior to progression to ST4.

5.6 Penultimate year assessment

The penultimate year ARCP must take place in person. The outcome must be of satisfactory progress to be eligible to sit the final year components of the FCEM examination.

5.7 Complaints and Appeals

There is a process for appeals relating to the college examinations. This is clearly detailed in the exam regulations, available on the College website.

All workplace-based assessments present an opportunity for feedback and dialogue between trainer and trainee. If the trainee wishes to complain about the outcome of such assessments this will be the responsibility of the local training management structures and involve the Head of School/ programme director or equivalent in the first instance.

The process of appeal is outlined in the Gold Guide, which is available at:-
<http://specialtytraining.hee.nhs.uk/news/the-gold-guide/>

6. WPBA for trainee progression

In the 2010 curriculum the review of WPBA at ARCP to decide on progression is ostensibly to ensure they are completed. As WPBA is unchanged in ACCS in this current schedule, the standard for progression is to complete all summative assessments and complete the required curriculum coverage using the WPBA tools outlined above.

In this 2015 iteration RCEM has recognised the ability of an expert faculty to make judgements on the suitability of a trainee to progress in training. This judgement should be as transparent as possible. To that end, trainers and trainees can refer to the table of developmentally aligned milestones. The minimum requirement of WPBA is designed for trainees progressing satisfactorily through these milestones in time. The decision about progression based on WPBA will be made over the whole training year. If trainees are having difficulties in particular areas, then the schedule is designed to identify these early in the year, with early engagement mandated. An educational programme would be put in place to allow the trainee to address concerns and chart progress. In this way a number of additional data-points and the opinion of a range of assessors would be available to inform decision-making at year-end.

The decision as to whether a trainee is ready to progress is multi-factorial, and ultimately the responsibility of the ARCP panel. The range of tools now available to cover both technical and 'non-technical' skills provides the potential for a comprehensive portrait of a trainee's progress for this purpose. At present, not enough is known about the performance of WPBA reflecting higher-level skills to give a defined rubric for their use. However, to give trainees an impression of how WPBAs are to inform judgement on their progress the following recommendations are made:

Trainees in all years of training would not be expected to progress to the next stage of training if significant concerns highlighted by WPBA were unresolved.

Progression in ACCS

All summative assessments must be completed by year-end, and curriculum coverage must be evidenced as laid out in this document.

Progression from ST3

Assessments of key PEM presentations must be complete.

Six Resuscitation cases: If trainees were consistently rated as requiring direct supervision for typical cases at the end of ST3 then progression to ST4 would be inappropriate.

ESLE: If a trainee is rated as at the level of a 'core trainee' in the majority of the domains of non-technical skills it would be inappropriate to progress to ST4.

Progression in HST

ESLE: If a trainee is consistently rated at a level below their current seniority, then progression would be inappropriate.

ESLE: If a trainee is consistently rated as working to the level of a consultant in only a small minority of the domains of practise, it would be inappropriate for them to exit training.

Remediation

Trainees with such findings in the first ESLE of the year should work with their educational or clinical supervisor to arrange further targeted episodes, with clear educational goals. These goals form a plan for the next episode, and may also include the use of other currently available workplace based assessments tools to build a comprehensive picture of progress through the year. Ultimately though, delays in training are not punitive and may reflect the complexity of the skill set required for independent EM practise and the variation that exists between practitioners.

7. Supervision and Feedback

7.1 Supervision

All elements of work in training posts must be supervised with the level of supervision depending on the experience of the trainee, case mix and workload. The duties, working hours and supervision of EM trainees must be consistent with the delivery of high quality safe patient care.

Initially there should be close supervision of the trainee with opportunities to discuss each case if required. As training progresses the trainee is expected to work with increasing autonomy, consistent with safe and effective care for the patient. It is important to establish that the trainee's knowledge, skills, behaviours and professional conduct are developing normally. The RCEM recommends that **named educational supervisors and named clinical supervisors should be allocated at least 0.25 pa per week per trainee** in order to deliver this standard of supervision.

Each department must ensure:

1. Trainees have access to on-line learning facilities and libraries
2. Adequate accommodation for trainers and trainees in which to prepare their work
3. A private area where confidential activities such as assessment, appraisal, counselling and mentoring can occur
4. A secure storage facility for confidential training records
5. A reference library where trainees have ready access to bench books (or electronic equivalent) and where they can access information at any time
6. Access for trainees to IT equipment such that they can carry out basic tasks on computer including the preparation of audiovisual presentations. Access to the internet is recognised as an essential adjunct to learning
7. A suitably equipped teaching area
8. A private study area
9. An appropriate rest area whilst on duty

The Head of School, Speciality Programme Lead or equivalent and College tutors are each responsible for ensuring that training and supervision are carried out according to GMC standards. Trainees should be represented at School or equivalent meetings and concerns can be raised in this forum.

Trainees will at all times have a named educational supervisor and named clinical supervisor responsible for overseeing their education. The trainee will also have relationships with senior clinicians who are responsible for providing clinical supervision relating to direct patient care. This role is separate to and different from the roles of named clinical supervisor and named educational supervisor.

These responsibilities have been defined by GMC as follows:

Named Educational Supervisor

A named educational supervisor is a trainer who is selected and appropriately trained to be responsible for the overall supervision and management of a trainee's trajectory of learning and educational progress during a placement or series of placements. Every trainee must have a named educational supervisor. The educational supervisor helps the trainee to plan their training and achieve agreed learning outcomes. He or

she is responsible for the educational agreement and for bringing together all relevant evidence to form a summative judgement at the end of the placement or series of placements.

Named Clinical Supervisor

A named clinical supervisor is a trainer who is responsible for overseeing a specified trainee's clinical work throughout a placement in a clinical or medical environment and is appropriately trained to do so. He or she will provide constructive feedback during that placement. He or she will lead on providing a review of the trainee's clinical or medical practice throughout the placement that will contribute to the educational supervisor's report on whether the trainee should progress to the next stage of their training.

Some training schemes appoint a named educational supervisor for each placement. The roles of clinical and educational supervisor may then be merged and only the merged role needs to be recognised.

The Educational Supervisor should discuss issues of clinical governance risk management and any report of untoward clinical incidents, including complaints and 'never events' involving the trainee. The Educational Supervisor should be contacted if there are any concerns identified. The supervisors are responsible for ensuring the trainee's Responsible Officer is informed of all relevant incidents.

It is a requirement in The GMC's Standards for Trainers that all ES and CS are appropriately trained.

College Tutor

All sites with specialty trainees in Emergency Medicine must appoint a Head of Specialty Training (College Tutor). This appointment will oversee the training of junior doctors in Emergency Medicine (both at Core Training and Higher Specialty Training level) on behalf of the LETB or equivalent and the Royal College of Emergency Medicine (RCEM). The prime function of the post holder is to ensure local delivery of training against the College standards and curriculum. The College Tutor should normally be a consultant of at least two years standing and must have been appointed to a substantive post by a properly constituted Advisory Appointments Committee (or equivalent for Foundation Trusts). He/She will be professionally accountable to the Royal College of Emergency Medicine, via the regional board structure, but the LETB (or equivalent) and Trust will monitor and manage their performance in their educational duties.

Training Programme Director

The training programme director (TPD) organises rotations. The TPD may be required to balance the needs of individual trainees, particularly at the higher training level, when making decisions relating to placements. TPDs may also be responsible for coordination of a rotational or school based education programme, including exam preparation.

Specialty Lead/Head of School

The Head of School or Speciality Lead (HoS) is responsible for coordination, quality and leadership of training in Emergency Medicine within their designated area.

7.2 Appraisal

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

The trainee and the Educational Supervisor should have a meeting at the beginning of each post within ACCS years 1&2 and at the start of each subsequent year. They should review the trainee's progress so far, agree learning objectives for the next training period (six months in ACCS and one year subsequently) and identify the learning opportunities. Reviewing progress through the curriculum will help trainees develop an effective Personal Development Plan (PDP) of objectives for the coming period. Both the trainee and supervisor should sign the educational agreement in the e-portfolio at this time recording their commitment to the training post.

It is recommended that there be a review midway through each ACCS post and midway through each subsequent year to review the PDP, progress through the curriculum and to ensure that the workplace based assessments are progressing satisfactorily, and that attendance at training events is recorded and reviewed.

At the end of each ACCS post and each subsequent year, the PDP and curriculum progress should be reviewed with the trainee's Educational Supervisor using evidence from the e-portfolio. It is an opportunity to record the areas where further work is required and the identification of specific concerns. Further evidence of competence in certain areas may be needed such as workplace based assessments and this should be recorded. If there are significant concerns then the programme director should be informed.

Trainees must seek and respond to feedback from a range of individuals to meet the requirements of *Good Medical Practice*.

7.3 Examination Feedback

Trainees who are successful in the College examinations will only receive that information, with no other feedback on their performance. The only exception to this is that the best performing candidates in each year at both membership and fellowship level will be awarded a medal.

Unsuccessful candidates will receive feedback as follows:

MCEM A

Pass mark required, mark achieved, with a breakdown of performance in each of the basic sciences tested within the examination. Performance in individual questions is not made available.

MCEM SAQ and OSCE

Total mark and pass mark for SAQ, stations passed for OSCE provided. Mark achieved and information on comparative performance of other candidates on individual questions in SAQ provided

Critical appraisal

Mark achieved, pass mark and generic commentary for all candidates on areas answered poorly within this examination

FCEM Management and CTR

A written report based on examiners comments and marks is sent. An alternative feedback route with face to face feedback provided by the head of school or nominated deputy, using the examination mark sheets to guide feedback is being piloted, replacing the written feedback.

FCEM SAQ and OSCE

Total mark and pass mark for SAQ, stations passed for OSCE provided. Mark achieved and information on comparative performance of other candidates on individual questions in SAQ provided. An alternative feedback route with face to face feedback provided by the head of school or nominated deputy, using the examination mark sheets to guide feedback is being piloted, replacing the written feedback.

7.4 Examiner training

The eligibility to be an examiner is described in the regulations published on the College website. Examiners must be actively involved in training EM trainees and be registered for Continuing Professional Development with the College. All examiners are trained for the specific examinations they are involved in. Peer review of examiner performance and feedback is in place. All examiners must have undertaken and maintain current training in equality and diversity prior to examining.

8. Managing curriculum implementation

The organisation of the Emergency Medicine training programme (ACCS CT1-3 & HST ST4-6) is the responsibility of the LETBs or equivalent. The Schools of Emergency Medicine or equivalent will coordinate local postgraduate medical training with terms of reference as follows:

- Participate in national recruitment to ACCS, DRE-EM and HST
- Oversee induction of trainees from Foundation to ACCS
- Allocation of trainees to rotations
- Oversee the quality of training posts provided locally
- Ensure adequate provision of appropriate educational events
- Ensure trainees are moved to the latest version of the curriculum at the earliest possible opportunity, meeting GMC standards
- Ensure curriculum implementation across training programmes
- Oversee workplace based assessment process within the training programme
- Coordinate the ARCP process for trainees
- Provide adequate and appropriate career advice
- Provide systems to identify and assist doctors with training difficulties
- Provide less than full time training
- Recognise the potential of specific trainees to progress into an academic career
- Educational programmes to train educational supervisors and assessors in workplace based assessment will be delivered by LETB's or their equivalent

Oversight of the implementation of the curriculum is the responsibility of the Training Standards Committee (TSC) of the Royal College of Emergency Medicine, which has representatives from each School and STC, trainee and lay representation, and supervises and reviews all training posts, ensuring the committee has wide experience of how the curriculum is being implemented in training centres. Trainees are represented at each level and are asked for curriculum feedback.

Curriculum changes will be communicated via the TSC to Heads of Schools/ STC Chairs and Training Programme Directors.

The e-portfolio allows Schools to monitor progress of trainees ensuring proper supervision and satisfactory progress.

8.1 Intended use of the curriculum by trainers and trainees

The curriculum is a web-based document available from RCEM website. The e-portfolio is provided by a third party. Access to the eportfolio is gained via the Royal College of Emergency Medicine by registering for training and paying the appropriate fee. The curriculum can be accessed on the College website or the GMC website.

The educational supervisors and trainees should access the up to date curriculum and will be expected to have a good knowledge of the curriculum and should use it as a guide for their training programme and trainee discussions.

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

Learning centred on clinical experience alone will lead to uneven coverage of the curriculum. Using the curriculum retrospectively simply as a check list as the exams approach will helpfully identify deficiencies but will leave the trainee with very limited time to learn of these conditions and probably little or no time to see patients with these problems. However, using the curriculum **proactively** both to confirm coverage and identify areas to be covered ensures more thoughtful and less frenetic learning, making cases more valuable learning experiences. The curriculum is also key to the planning of tutorials and assessments.

8.2 Recording progress in the e-portfolio

On enrolling with the RCEM trainees will be given access to the e-portfolio. The e-portfolio allows evidence to be built up to inform decisions on a trainee's progress and provides tools to support the trainee's education and development.

The trainee's responsibilities are to:

- Keep their e-portfolio up to date
- Arrange assessments in a timely manner (WPBAs, MSF) and ensure they are recorded
- Prepare drafts of appraisal forms
- Maintain their personal development plan
- Record their reflections on learning and record their progress through the curriculum

The supervisor's responsibilities are:

- Use e-portfolio evidence (assessment outcomes, reflections, and PDPs) to inform appraisal meetings
- Update the trainee's progress through the curriculum
- Write end of attachment appraisals and supervisor's reports

All appraisal meetings, personal development plans and workplace based assessments should be recorded in the e-portfolio. Trainees are encouraged to reflect on their learning experiences and to record these in the e-portfolio (these can be kept private or shared with the trainer).

Reflections, assessments and other e-portfolio content should be linked to the curriculum competences in order to provide evidence towards acquisition of these competences.

9. Curriculum review and updating

The Curriculum committee of the RCEM will oversee the updating of the curriculum and its submission to the GMC. This committee reports to Council of RCEM via the Education committee.

The RCEM and RCPCH will oversee updating the PEM sub-specialty curriculum.

The evaluation of the curriculum and e-portfolio will seek to ascertain:

- Learner response to the curriculum
- Modification of attitudes and perceptions
- Learner acquisition of knowledge and skills
- Learner's behaviour change
- Change in organisational practice

Evaluation methods will include:

- Trainee questionnaire
- Programme director questionnaire
- Focused discussions with educational supervisors, trainees, Programme Directors and Postgraduate Deans

Trainee involvement in curriculum review will be facilitated by:

- Involvement of trainees in local training committees
- Trainee involvement in curriculum development via Curriculum Committee and TSC
- Informal feedback during appraisal, ARCP and RCEM meetings

10. Equality and Diversity

The RCEM conforms to the view that equality of opportunity is fundamental to the selection, training and assessment of doctors. It seeks to recruit trainees regardless of race, religion, ethnic origin, disability, age, gender or sexual orientation. Patients, trainees and trainers and all others amongst whom interactions occur have a right to be treated with fairness and transparency in all circumstances and at all times. Equality characterises a society in which everyone has the opportunity to fulfil his or her potential. Diversity addresses the recognition and valuation of the differences between and amongst individuals. Promoting equality and valuing diversity are central to the curriculum.

The importance of equality and diversity in the NHS has been addressed by the Department of Health in England in 'The Vital Connection'; in Scotland in 'Our National Health: A Plan for Action, A Plan for Change' and in Wales by the establishment of the NHS Wales Equality Unit. These themes must therefore be considered an integral part of the NHS commitment to patients and employees alike. The theme was developed in the particular instance of the medical workforce in 'Sharing the Challenge, Sharing the Benefits – Equality and Diversity in the Medical Workforce'. Furthermore, equality and diversity are enshrined in legislation enacted in both the United Kingdom and the European Union. Prominent among the relevant items of legislation is:

- Equality Act 2010

The RCEM believes that the equality of opportunity is fundamental to the many and varied ways in which individuals become involved with the College.

The RCEM welcomes contributors and applicants from as diverse a population as possible and actively seeks to recruit people to all its activities regardless of race, religion ethnic origin, disability, age, gender or sexual orientation. It is therefore essential that all persons involved in the management of training are trained and well versed in the tenets of equality and diversity. It is expected that all trainers should be trained in equality and diversity.

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

A record of completion of this training must be held in the trainee's portfolio.

Compliance with anti-discriminatory practice will be assured through:

- Monitoring of recruitment processes
- Ensuring attendance at appropriate training sessions for RCEM representatives and programme directors
- Ensuring trainees have an appropriate confidential and supportive route to report examples of inappropriate behaviour of a discriminatory nature
- Monitoring of College examinations
- Ensuring all assessments discriminate on objective and appropriate criteria and do not unfairly disadvantage trainees because of age, gender, ethnicity, sexual orientation or disability (other than that which would make it impossible to practice safely as an Emergency Physician)

All efforts shall be made to ensure the participation of people with a disability in training. The RCEM makes special provision for candidates with special needs such as dyslexia, visual impairment and other aspects as appropriate. The Education Committee is responsible for policy and regulations in respect of decisions on accommodations to be offered to candidates with disabilities.

Examiners in the College examinations, examinations staff and role players in the College examinations are required to undergo training in equality and diversity.

Acknowledgements

The RCEM wishes to thank all who have contributed to the writing of this document and its predecessor documents

For Anaesthesia, AM, ICM (derived from ACCS curriculum)

Andy Tomlinson
Mike Jones
Peter Nightingale
C Smith
Jonathan Goodall
David Greaves
Helen Cugnoni

ST3 paediatric EM (derived from EM CT3 curriculum)

Katherine Berry
Omnia Marzouk
Ffion Davies
Alison Smith

ST3-6 EM (derived from ACCS, EM CT3 and HST curriculum)

Susanne Shale
Steven Timmons
Tim Coats
Ruth Brown
Mike Clancy
Wayne Hamer

2015 revision

Ruth Brown
Julia Harris
Colin Holburn
Nickie Jakeman
Jason Long
Kevin Reynard
Will Townend