CCT in Anaesthetics

2021 Curriculum

Stage 2 Guidebook

Contents

Message from the Training Programme Director

Hello,

Welcome to the Birmingham School of Anaesthesia. You have embarked on a four-year Specialist Training Programme and hopefully a successful career in Anaesthesia. I hope very much that you will enjoy the experience and challenges ahead.

This document has been developed (by trainees, for trainees) to try and make your journey through to CCT a little bit easier. I hope you find it a useful guide to your training.

If you have any questions regarding any part of your training then please feel free to contact me at any time.

Enjoy your training.

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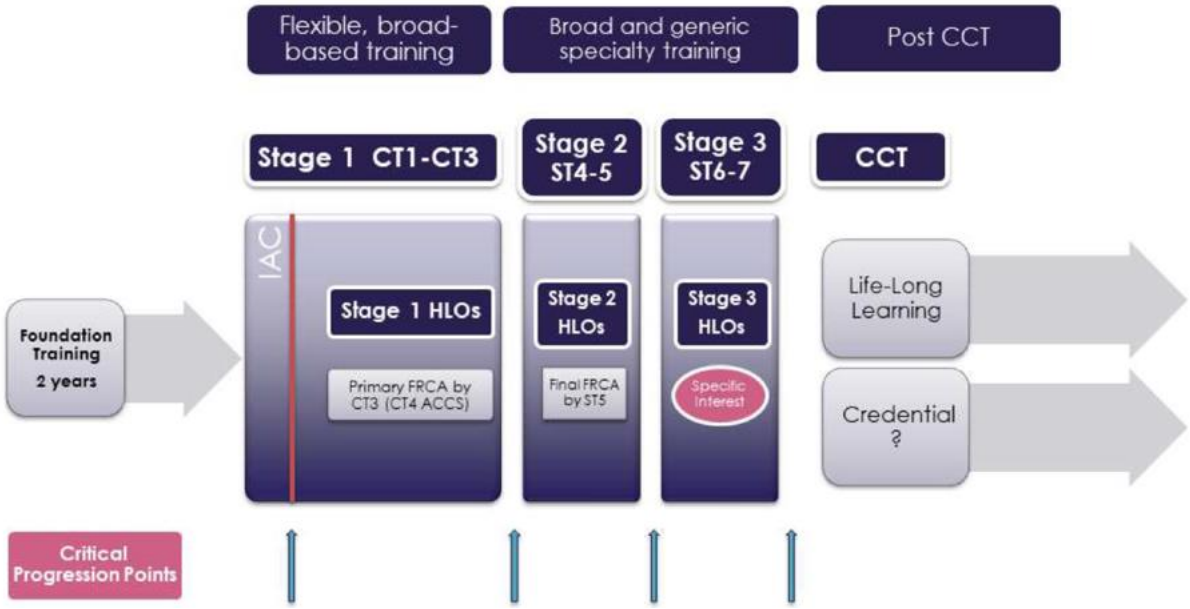
Birmingham School of Anaesthesia Website: www.thebsa.info

General Guidance

This guidebook sets out the requirements for satisfactory completion of Stage 2 of anaesthetic training. This covers St4 and St5 year of training.

The 2021 Curriculum is split into 3 stages of training with 14 Domains of Learning for each stage. These are divided into **7 generic professional** and **7 specialty specific domains**, with a learning outcome for each stage. Within each domain several Key Capabilities are described to help achieve the High-Level Learning Outcome for that domain.



At the end of your ST5 year, evidence of completion of all 14 domains is required in stage 2 before proceeding to stage 3. You will also need to have passed the Final FRCA by the end of ST5 to progress to stage 3. Moving from stage 2 to stage 3 is referred to as a Critical Progression Point.

Holistic Assessment of Learning Outcomes (HALOs)

Holistic Assessment of Learning Outcomes (HALO) is the Summative Assessment for each domain of the 2021 Curriculum.

To complete each HALO you need to demonstrate:

- Appropriate clinical experience and logbook data (in the case of specialty specific domains)
- Completion of at least one Multiple Trainer Report (MTR)
- Attainment of all of the Key Capabilities within the Domain of Learning

You can use the following as evidence for attainment of such Key Capabilities:

- Clinical experience and logbook data
- Supervised Learning Events (SLEs)
- Personal Activities (incl. courses, teaching sessions or simulation)
- Personal Reflection

These activities can be linked to more than one Key Capability as well as more than one of the Domains of Learning.

Each Speciality specific domain of Learning will have a named trainer of the local Assessment Faculty in each Trust, who has responsibility for completion of the specific Domain of Learning. All evidence and assessments should be completed using the Lifelong Learning Platform (LLP).

All generic professional domains can be reviewed and completed by the Educational Supervisor. For the Safety and Quality Improvement (QI) domain, a separate assessor may be designated by the College Tutor who has experience and engagement in QI activities.

As HALOs are unlikely to be completed until the latter phase of each stage of training, ARCPs will need evidence of engagement with training processes throughout the stage of training. This means that uploading/linking such evidence should not be reserved until the end of each stage.

Multiple Trainer Reports(MTR)

MTRs are consultant feedback. A minimum of one MTR is required for each year of training. The MTR is also required to support HALO completion and a single MTR can be attached to demonstrate progress across all the HALOs of the curriculum. MTRs are sent out by your college tutor or educational supervisor (ES). A minimum of 3 individual MTR responses are required for the process to be valid. MTRs are different to multisource feedback (MSF). One MSF should also be done per year.

Supervised Learning Events (SLEs)

SLEs have replaced the term workplace-based assessments (WPBAs). SLEs have been updated to emphasise the importance of feedback and reflection, and now also includes a level of supervision scale (explained below). These SLEs should promote professional educational discussions and guide future learning and development of practice so the desired supervision level for your stage is reached.

SLEs will include the usual A-CEX, DOPS, CBD and ALMAT, however a new SLE has also been introduced for the formative assessment of Quality Improvement activities, known as the Anaesthesia-Quality Improvement Project Assessment Tool (A-QIPAT). DOPS should be used to assess practical procedures.

There is no minimum number of SLE requirements for any of the Domains of Learning and one SLE can provide evidence for more than one of the Key Capabilities. SLEs can be completed by all trainers and is not limited to the members of the assessment faculty.

Table 1 - The programme of assessment (** critical progression point)

	Stage 1			Stage 2		Stage 3	
	CT1	CT2	CT3 **	ST4	ST5 **	ST6	ST7 **
***Formative* Supervised Learning Events (SLEs)**							
A-CEX	There is no requirement for a minimum number of SLEs each year. The anaesthetist in training should use SLEs in a formative way to demonstrate reflection on learning and progress. Feedback on the learning event should help the learner improve their practice. The SLEs allow the trainer to indicate what level of supervision is required for the trainee for that case or procedure. Feedback should include guidance on how the learner develops their practice to reach the desired supervision level. Practical procedures should be assessed with a DOPS tool.						
ALMAT							
CBD							
DOPS							
A-QIPAT							
***Summative* Assessments**							
Initial Assessment of Competence (IAC) **	• Completed in CT1 • Supervision level 2b • EPAs 1 and 2						
Initial Assessment of Competence in Obstetric Anaesthesia (IACOA)	• Completed by end of CT2 • Supervision level 3 • EPAs 3 and 4						
MSF (one per year)	✓	✓	✓	✓	✓	✓	✓
Multiple Trainer Report	✓	✓	✓	✓	✓	✓	✓
HALO	Stage 1 domains of learning 1-14			Stage 2 domains of learning 1-14		Stage 3 domains of learning 1-14	
FRCA Examinations							
Primary FRCA			Essential				
Final FRCA					Essential		
Educational Supervisors Structured Report (ESSR)							
ESSR	✓	✓	✓	✓	✓	✓	✓

Assessment of Discrete Areas of Anaesthetic Practice within General Anaesthesia and Perioperative Medicine and Health Promotion: The 'Triple C' Form

In the new curriculum, *cardiothoracic anaesthesia, neuro-anaesthesia, obstetric anaesthesia, and paediatric anaesthesia* are integrated into the General Anaesthesia and Perioperative Medicine and Health Promotion domains.

The specific Key Capabilities for these discrete areas of clinical anaesthetic practice can be completed by a designated member of the local Assessment Faculty and captured on the LLP using the Completion of Capability Cluster ('Triple C') Form. The Triple C form is equivalent to a "mini-HALO" form within the bigger domain.

As for the completion of a HALO for one of the *14 domains of learning*, the completion of the Triple C form for *each discrete area of clinical anaesthetic practice* requires demonstration of:

- Appropriate clinical experience and logbook data
- Attainment of all of the Key Capabilities within the specific area of clinical anaesthetic practice, as evidenced by your logbook data, SLE's, personal activities (courses, teaching sessions, simulation etc) and personal reflections (as for a HALO). It is suggested, but not mandatory, that each discrete area should have its own MTR.

The completed 'Triple C' form will then be viewable within the LLP to support completion of the HALO for General Anaesthesia and Perioperative Medicine and Health Promotion domains.

Discrete Block lengths

Cardiac, neuro, ICM and paediatrics will be three month blocks. Paediatrics will be done at BCH.

Dual trainees

Dual trainees (ICM and anaesthesia) will need to complete neuro, cardiac, paediatrics and ICM in their ST5 year, as this is the only year where the stage 2 ICM and stage 2 anaesthesia requirements overlap.

Levels of Supervision

At each stage of training, the specialty specific domains of the curriculum will describe the level of supervision that the trainee needs to demonstrate by the end of the stage of training.

1	Direct supervisor involvement, physically present in theatre throughout
2A	Supervisor in theatre suite, available to guide aspects of activity through monitoring at regular intervals
2B	Supervisor within hospital for queries, able to provide prompt direction/assistance
3	Supervisor on call from home for queries, able to provide directions via phone or non-immediate attendance
4	Should be able to manage independently with no supervisor involvement (although should inform consultant supervisor as appropriate to local protocols)

Educational Supervision Meetings

You will be allocated an educational supervisor each time you start in a Trust. It is your responsibility to meet with them within the first few weeks of your placement. The initial meeting is documented as a PDP or labelled initial meeting and recorded under 'personal activities'. You are then required to have a formal meeting every three months and these should be recorded under 'personal activities'. For the meeting at the end of your hospital placement, a mini ESSR should be produced. For your ARCP you will need to complete a final ESSR form that spans the whole year from your previous ARCP.

LLP requirements

Yearly

- Form R
- Personal Development Plan (PDP)
- Final ESSR form (complete prior to ARCP)
- MSF
- Multiple trainer report (MTR)

Initial meeting with your supervisor

- Discuss and set PDP, record initial meeting under 'personal activities' on LLP

Three monthly until the end of your placement

- Review & sign off PDPs as appropriate
- Evidence documented of a meeting in 'personal activities'

End of placement

- Discuss/set future PDPs
- Evidence documented as an appropriately labelled ESSR if not the last Trust you will work in before your next ARCP

Domains of Learning

a. Generic Professional Domains

Professional Behaviours and Communication

Stage learning outcome

Demonstrates the professional values and behaviours required of senior anaesthetists in training

Key capabilities

A	Guides and advises colleagues who are less experienced than themselves on professional matters
B	Formulates management plans for patients with complex needs, recognising the limits of their own experience and competence and seeks assistance where appropriate
C	Recognises and reflects on how the behaviour of themselves and others can affect the effective delivery of health care and patient safety
D	Acts as a good role model for more junior colleagues and other members of the multidisciplinary team
E	Acts and responds appropriately in difficult situations such as medical emergencies, whilst demonstrating professional behaviour and good judgement and maintains situational awareness
F	Communicates effectively and sensitively when breaking bad news to patients and their relatives, demonstrating awareness of cultural and social differences
G	Describes the effects of working patterns or lifestyle choices on physical and mental health and takes steps to minimise the impact

Examples of Evidence

Experience & Logbook

- range of surgical specialties and patient groups in theatre setting, obstetrics, pre-operative assessment clinics and Intensive Care Unit.

Supervised Learning Events (SLEs) can be used to demonstrate:

- discussion with patients' relative on ICU
- formulation of treatment plan for a patient with complex needs in the pre-operative assessment clinic or ICU setting and discussion of this plan with the wider team
- professional behaviours during an emergency situation in theatre, ICU, A&E etc
- leadership in theatre lists (ALMAT)
- high standards in prescribing medication.

Personal Activities and Personal Reflections may include:

- simulation and other courses such as resuscitation, communication skills, inter-hospital transfer
- awareness and application of Caldicott principles
- participation in junior doctors forum meetings
- delivery of teaching sessions and feedback.

Other evidence

- satisfactory MSF

Cross links with other domains and capabilities

- *Safety and Quality Improvement*
- *Education and Training*
- all specialty specific domains

Management and Professional and Regulatory Requirements

Stage learning outcome

Understands and undertakes managerial, administrative and organisational roles expected of senior anaesthetists in training

Key capabilities

A	Appreciates and participates in the organisation of anaesthetic services within the structure of local hospital management and links to regional tertiary level services
B	Applies legal and ethical guidelines to their medical practice, including the legal requirements of consent and shared decision making
C	Engages with the departmental management structure and processes required for the delivery of perioperative and anaesthetic services.
D	Works effectively in the digital environment relating to patient care

Examples of Evidence

Experience & Logbook

- involvement with Anaesthetic Departmental Activities.

Supervised Learning Events (SLEs) can be used to demonstrate:

- ability to use hospital investigation IT systems, electronic prescribing, electronic medical records
- participation in patient advice and decision-making pathway in pre-operative assessment
- obtaining consent for procedures

Personal Activities and Personal Reflections may include:

- management of a project in the anaesthetic department such as a teaching programme, QI project, rota administration for anaesthetists in training
- attendance at departmental business meetings
- courses or eLearning: NHS structure and management, NICE guidance on shared decision making.

Cross links with other domains and capabilities

- *Safety and Quality Improvement*
- *Education and Training*
- *Perioperative Medicine and Health Promotion*

Team working

Stage learning outcome

Demonstrates safe and effective followership and leadership in clinical teams

Key capabilities

A	Provides assistance and leadership to less experienced colleagues
B	Recognises their own leadership style and how it may impact on others
C	Analyses and reflects on decision making, and explains this to others
D	Promotes and effectively participates in multidisciplinary and inter-professional team working
E	Applies teamworking skills to effectively manage complex dynamic situations

Examples of Evidence

Experience & Logbook

- range of surgical specialties and patient groups in theatre setting, obstetrics, pre-operative assessment clinics and Intensive Care Unit.

Supervised Learning Events (SLEs) can be used to demonstrate:

- supervision of more junior anaesthetists in training out of hours
- ability to lead resuscitation teams in the clinical setting
- leadership and management of theatre teams (ALMAT)
- decision making in clinical management of cases in theatre etc.

Personal Activities and Personal Reflections may include:

- completion of resuscitation courses
- simulation training
- being part of simulation course faculty
- reflection on constructive feedback given to colleague
- portfolio evidence of personal development plans and regular meetings with educational supervisors.

Other evidence

- Satisfactory MSF

Cross links with other domains and capabilities

- *Safety and Quality Improvement*
- *Resuscitation and Transfer*
- all specialty specific domains.

Safety and Quality Improvement

Stage learning outcomes

Able to lead a local quality improvement project.

Applies the principles of patient safety in the hospital context

Key capabilities

A	Knows when and how to apply quality improvement science with the aim of improving services while maintaining patient safety
B	Recognises the factors influencing reliable care
C	Demonstrates knowledge of variation with respect to interpreting measurement, understanding types of variation, and differentiating between expected and unwarranted variation
D	Utilises appropriate measurement techniques for improvement, and demonstrates whether a change has occurred and its impact
E	Contrasts 'data for assurance' and 'data for improvement' and uses both data appropriately
F	Uses simple proactive safety techniques to prevent harm to patients, including the assessment of likelihood and severity of risks
G	Matches expertise and resources to the level of clinical risk posed to patients
H	Describes the impact of anaesthetists' actions on patient safety more broadly in the hospital and wider healthcare system
I	Describes the principles of medication safety
J	Explains the process of critical incident follow-up

Examples of Evidence

Experience & Logbook

- involvement in QI activities within Anaesthetics department and experience of hospital wide QI and risk assessment.

Supervised Learning Events (SLEs) can be used to demonstrate:

- leadership of local QI project
- presentation of QI project results
- implementation of QI project outcomes recognizing challenges eg sustainability, up-scaling, spreading
- A-QIPAT
- case(s) resulting in completion of incident form
- observance of theatre safety practices such as Stop Before You Block, WHO checklist.

Personal Activities and Personal Reflections may include:

- Courses or eLearning: quality improvement methodology, medicines management, human factors
- Reflection on critical incident
- Involvement with critical incident investigations
- Attendance at quality improvement meetings

Cross links with other domains and capabilities

- *Professional Behaviours and Communication*
- *Team working*
- *Perioperative Medicine and Health Promotion*
- *Resuscitation and Transfer*
- other specialty specific domains.

Safeguarding

Stage learning outcome

Recognises safeguarding concerns in patients and healthcare professionals

Key capabilities

A	Identifies, documents and acts on child protection and vulnerable patient concerns
B	Communicates effectively with appropriate teams, appreciating the issues of confidentiality, consent, information sharing and data protection
C	Applies the principles of adult safeguarding: empowerment, prevention, proportionality, protection, accountability, partnership
D	Applies the mental capacity legislation in clinical practice to protect the safety of individuals and society, and to address appropriate consent to treatment
E	Describes the needs and support required for people with learning disabilities, autism, acute confusion, dementia and mental illness

Examples of evidence

Experience & Logbook

- range of surgical specialties and patient groups in theatre setting, obstetrics, pre-operative assessment clinics and Intensive Care Unit.

Supervised Learning Events (SLEs) can be used to demonstrate:

- management of consent with a child or adolescent involving parents
- knowledge of the local procedure for referral of a child for safeguarding concerns
- involvement with cases where there are safeguarding issues with children or adults
- adjustment to pre-operative assessment and consent when dealing with vulnerable adults or children
- involvement with cases dealing with vulnerable adults and children as listed in key capability E.

Personal Activities and Personal Reflections may include:

- attendance at local mandatory training including safeguarding, information governance and mental capacity act
- experience of the involvement of an Independent Mental Capacity Advocate

Cross links with other domains and capabilities

- *Professional Behaviours and Communication*
- *Education and Training*
- all specialty specific domains.

Education and Training

Stage learning outcome

Plans, delivers and reflects on educational activities provided to other learners

Key capabilities

A	Describes the processes involved in planning and delivering educational programmes
B	Provides safe clinical supervision of learners in the workplace
C	Seeks, reflects on and acts upon feedback on their delivered educational activity
D	Explains the role of the patient in teaching and learning and respects their wishes
E	Describes the advantages and limitations of simulation and technology enhanced learning
F	Actively participates in patient education
G	Provides timely and supportive developmental feedback for all colleagues
H	Leads departmental educational sessions

Examples of Evidence

Experience & Logbook

- range of clinical experience taking advantage of all opportunities for teaching and learning.

Supervised Learning Events (SLEs) can be used to demonstrate:

- use of SLEs throughout stage of training to facilitate learning and guide progress
- supervision of more junior colleague.

Personal Activities and Personal Reflections may include:

- courses: Teaching and training courses such as Generic Instructor (GIC), Anaesthetists as Educators
- acting as part of teaching faculty in simulation courses
- planning and delivery of teaching sessions with feedback
- development of patient information material
- involvement with development and/or delivery of department teaching programmes.

Cross links with other domains and capabilities

- all specialty specific and generic professional domains.

Research and Managing Data

Stage learning outcome

Is research ready: develops critical appraisal skills; gains a broader understanding of data management and research methodology; communicates research evidence to patients and colleagues in a meaningful way

Key capabilities

A	Assesses the quality of research and its place in the literature when considering changes to practice
B	Can communicate to patients, the public and colleagues the strengths and limitations of evidence underlying anaesthetic and perioperative practice
C	Develops the ability to critically appraise published literature
D	Describes key approaches to improving patient outcomes through research including: clinical trials, stratified medicine, genomics, informatics, qualitative techniques, systematic review and meta-analysis, health services research
E	Explains the details of data protection in research
F	Describes the key components of research and its governance with emphasis on ethical considerations and ethics committees, translation into practice and the roles of Trust and University research and development departments
G	Applies a variety of statistical techniques used in research and understands their strengths and limitations

Examples of Evidence

Supervised Learning Events (SLEs) can be used to demonstrate:

- use of evidence-based national or local guidelines
- accessing and interpreting evidence from the literature (CBD).

Personal Activities and Personal Reflections may include:

- involvement in data collection as part of a local, regional or national study
- critical appraisal of journal article for example at a journal club meeting
- presentation of poster or paper at a regional or national meeting
- involvement in developing local guidelines
- appropriate use of statistics when contemplating research projects
- participation in trainee research network activities
- GCP certificate completion
- courses: research methodology, information governance.

Cross links with other domains and capabilities

- *Safety and Quality Improvement*

b. Specialty Domains of Learning

Perioperative medicine and health promotion

Stage learning outcome

Works with patients to reduce the risks associated with surgery

Key capabilities A to H

A	Delivers high quality, individualised perioperative care to ASA 1-4 patients for elective surgery and ASA 1-3 emergency patients, focusing on optimising patient experience and outcome
B	Liaises appropriately with other healthcare professionals to optimise patient care
C	Explains the principles of shared decision making
D	Makes appropriate plans to mitigate co-morbidities and their treatment in the perioperative period, with particular reference to less common cardiovascular, neurological, respiratory, endocrine, haematological and rheumatological diseases
E	Appreciates how integrated care pathways influence patient outcomes
F	Describes the use and limitations of common risk-scoring systems
G	Recognises when advanced physiological testing is indicated, interpreting the data to help stratify risk
H	Applies basic sciences to perioperative care

Examples of Evidence

- SLEs throughout stage of training across range of surgical specialties including emergency surgery, obstetrics, paediatrics, neuro, cardiac and experience in pre-operative assessment clinics.

Personal activities and reflections:

- attendance at pre-operative assessment clinics
- knowledge of NICE guidance on shared decision making
- awareness of integrated care pathways in the devolved nations
- eLearning or teaching sessions on risk scoring, cardiopulmonary exercise testing
- Final FRCA.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance

Cross links with other domains and capabilities

- *Management and Professional and Regulatory Requirements*
- *General Anaesthesia*

Key capabilities I to K

I	Applies the principles of public health interventions such as smoking cessation, reducing obesity and alcohol intake
J	Recognises the potential harms of health care interventions
K	Explains how religious, cultural, and lifestyle factors may influence healthcare choices, such as blood transfusions, implants and use of animal derived products

Examples of Evidence

- SLEs throughout stage of training across range of surgical specialties and experience in pre-operative assessment clinics.

<u>Personal activities and reflections:</u>

- involvement with health promotion interventions with patients in pre-operative assessment clinics such as smoking cessation, prehabilitation
- knowledge of guidance of use of blood and blood products in Jehovah's Witnesses.

Suggested supervision level

- 2b - supervisor within hospital for queries, able to provide prompt direction/assistance

Cross links with other domains and capabilities

- *General Anaesthesia*

Key capability L

L	Describes the needs and roles of carers and those providing support in the perioperative period and applies this to practice

Examples of Evidence

- SLEs throughout stage of training across range of surgical specialties and experience in pre-operative assessment clinics.

Suggested supervision level

- not applicable.

Cross links with other domains and capabilities

- *Safeguarding*
- *General Anaesthesia*

Key capabilities M & N

M	Describes the requirement for postoperative organ support and its limitations
N	Applies end of life care as part of a multidisciplinary team

Examples of Evidence

- SLEs throughout stage of training across range of surgical specialties including emergency surgery, neuro, cardiac and experience in intensive care and pre-operative assessment clinics.

Personal activities and reflections:

- discussion with relatives of patients on Intensive Care.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance

Cross links with other domains and capabilities

- *Team Working*
- *Intensive Care*

Key capabilities O to Q

O	Explains and acts on the importance of perioperative management of haematological conditions including anaemia and coagulopathy
P	Recognises the factors associated with abnormal perioperative nutritional status and applies strategies to mitigate risks where appropriate
Q	Applies adjustments required that co-existing disease and surgical complexity have on the conduct of anaesthesia and perioperative care, including frailty, cognitive impairment and the impact of substance abuse or obesity

Examples of Evidence

- SLEs throughout stage of training across range of surgical specialties including emergency surgery, obstetrics, paediatrics, neuro, cardiac and experience in pre-operative assessment clinics
- demonstration of application of adjustments for patient groups described above.

Personal activities and reflections:

- knowledge of local and national guidance on management of anaemia peri-operatively.

Suggested supervision level

- 2b - supervisor within hospital for queries, able to provide prompt direction/assistance.

Cross links with other domains and capabilities

- *General Anaesthesia*

Paediatric anaesthesia: key capability R

R	Demonstrates adjustments in perioperative care for children with co-morbidity

Examples of Evidence

- SLEs throughout stage of training across range of surgical specialties including emergency surgery.

Suggested supervision level

ASA 1-3 children aged 1-5:

- 2a - supervisor in theatre suite, available to guide aspects of activity through monitoring at regular intervals

ASA 1-3 children aged 5 and over:

- 2b - supervisor within hospital for queries, able to provide prompt direction/assistance.

Cross links with other domains and capabilities

- *General Anaesthesia*

Obstetric anaesthesia: key capabilities S & T

S	Plans appropriate obstetric anaesthetic care for all parturients collaboratively with the wider multi-disciplinary team
T	Recognises and manages critical illness in parturients, including immediate resuscitation, and leads the care of acute obstetric emergencies

Examples of Evidence

- SLEs throughout stage of training in obstetrics including out of hours work and experience in pre-operative assessment clinics.

Personal activities and reflections:

- attendance at obstetric anaesthesia clinics.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance

Cross links with other domains and capabilities.

- *General Anaesthesia*
- *Regional Anaesthesia*
- *Resuscitation and Transfer*
- *Intensive Care*

General Anaesthesia

Stage learning outcome

Provides safe and effective general anaesthesia with distant supervision for ASA 1 - 3 patients undergoing non-complex elective and emergency surgery within all settings

Key Capability A

A	Explains the specific factors in providing safe anaesthetic care for patients at extremes of age, including neonates, children and older people with frailty, and implements these in practice

Examples of Evidence

- SLEs throughout stage of training in a range of surgical specialties including paediatrics.

Personal activities and reflections:

- Final FRCA.

Suggested supervision level

- not applicable.

Cross links with other domains and capabilities

- *Perioperative Medicine and Health Promotion*
- *General Anaesthesia*

Key capability B

B	Provides appropriate anaesthesia care for patients undergoing day case surgery in all settings

Examples of Evidence

- SLEs throughout stage of training in a range of surgical specialties

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance

Cross links with other domains and capabilities

- *Perioperative Medicine and Health Promotion*
- *Regional anaesthesia*
- *Pain*

Key capability C

C	Describes the principles of intra-operative haemostasis and manages major haemorrhage

Examples of Evidence

- SLEs throughout stage of training in a range of surgical specialties including out of hours work, trauma.

Personal activities and reflections:

- mandatory training: blood transfusion.

Suggested supervision level

- 2b - supervisor within hospital for queries, able to provide prompt direction/assistance

Cross links with other domains and capabilities.

- *Perioperative Medicine and Health Promotion O*
- *Resuscitation and Transfer*

Key capabilities D to F

D	Provides safe care for ASA 1-3 adult patients with multiple injuries from arrival in hospital to post-operative care and seeks help appropriately
E	Describes the anaesthetic-related problems associated with trauma including burns, poisoning, electrical injuries, and drowning
F	Applies physiological & pharmacological principles to reduce the risk of secondary brain injury in patients presenting with a severe head injury

Examples of Evidence

- SLEs throughout stage of training including out of hours work and experience in major trauma centre and neurosurgery.

Personal activities and reflections:

- Simulation training: Trauma resuscitation.

Suggested supervision level

- 2b - supervisor within hospital for queries, able to provide prompt direction/assistance.

Cross links with other domains and capabilities

- *Resuscitation and Transfer*

Key capability G

G	Recognises, mitigates against risks and manages complications relating to patient positioning during surgery, including reference to the obese patient

Examples of Evidence

- SLEs throughout stage of training in a range of surgical specialties including obstetrics, neuro and bariatric surgery.

Personal activities and reflections:

- courses and eLearning: Anaesthesia for the obese patient.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance

Cross links with other domains and capabilities.

- *Safety and Quality Improvement*

Key capability H

H	Applies a sound understanding of anatomy, physiology, biochemistry, pharmacology, physics and clinical measurement to anaesthetic practice

Examples of Evidence

- SLEs throughout stage of training in a range of surgical specialties.

Personal activities and reflections:

- Final FRCA

Suggested supervision level

- not applicable.

Cross links with other domains and capabilities

- *Perioperative Medicine and Health Promotion*
- *Regional Anaesthesia*

Key capabilities I & J

I	Safely manages patients with complex airways including the ability to perform videolaryngoscopy with local supervision
J	Manages non-complex shared airway surgery with distant supervision

Examples of Evidence

- SLEs throughout stage of training in a range of surgical specialties including ENT and Maxillo-facial surgery.

Personal activities and reflections:

- simulation courses: airway management.

Suggested supervision level

- refer to practical procedures grid for details of airway management.

Cross links with other domains and capabilities

- *General Anaesthesia*

Key capability K

K	Explains the problems associated with laparoscopic, endoscopic and open procedures, including those with major blood loss, and provides safe general anaesthesia for these procedures with distant supervision for ASA 1 to 3 adult patients

Examples of Evidence

- SLEs throughout stage of training in a range of surgical specialties.

Personal activities and reflections:

- Final FRCA.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance.

Cross links with other domains and capabilities

- *Perioperative Medicine and Health Promotion*
- *General Anaesthesia*

Key capability L

L	Provides safe general anaesthesia for diagnostic and therapeutic procedures in the non-theatre environment but within the hospital setting for ASA 1-3 adult patients independently, recognising when this is inappropriate

Examples of Evidence

- SLEs throughout stage of training. Case examples could come from radiology, ECT, cardioversion, Emergency Department.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance.

Cross links with other domains and capabilities

- General Anaesthesia
- Resuscitation and Transfer

Neuro anaesthesia: key capabilities M & N

M	Applies relevant anatomical, physiological and pharmacological principles to neurosurgical patients
N	Provides safe anaesthetic care to ASA 1-3 adults for simple elective and emergency intracranial, spinal and neuroradiology procedures under local supervision

Examples of Evidence

- SLEs from experience in neurosurgery.

<u>Personal activities and reflections:</u>

- Final FRCA

Suggested supervision level

- 2a - supervisor in theatre suite, available to guide aspects of activity through monitoring at regular intervals.

Cross links with other domains and capabilities

- *General Anaesthesia*

Cardiothoracic anaesthesia: key capabilities O to R

O	Applies basic science and clinical anaesthetic principles to patients undergoing cardiac and thoracic surgery
P	Describes the principles of anaesthesia for on and off bypass cardiac and thoracic surgery
Q	Provides safe anaesthetic care to ASA 1–3 adults undergoing elective cardiac revascularization, valvular surgery and cardiology procedures under direct supervision
R	Demonstrates safe anaesthetic care for adults requiring non-complex thoracic procedures under direct supervision, including one lung ventilation

Examples of Evidence

- SLEs from experience in cardiac and thoracic surgery.

Personal activities and reflections:

- Final FRCA.

Suggested supervision level

- 2a - supervisor in theatre suite, available to guide aspects of activity through monitoring at regular intervals.

Cross links with other domains and capabilities

- *Perioperative Medicine and Health Promotion*

Key capability S

S	Explains the anaesthetic implications of ophthalmic surgery, in particular the penetrating eye injury and the presence of intraocular gas

Examples of Evidence

- SLEs from experience in ophthalmic surgery and trauma.

Personal activities and reflections:

- eLearning: ophthalmic anaesthesia.

Suggested supervision level

- not applicable.

Cross links with other domains and capabilities

- *General Anaesthesia*
- *Regional Anaesthesia*

Obstetric anaesthesia: key capability T

T	Provides safe anaesthetic care for elective and emergency obstetric patients including those with co-morbidities and obstetric complications with distant supervision

Examples of Evidence

- SLEs throughout stage of training in obstetrics including out of hours work and experience in pre-operative assessment clinics.

Personal activities and reflections:

- attendance at obstetric anaesthesia clinics
- simulation training: obstetric emergencies.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance.

Cross links with other domains and capabilities

- *Perioperative Medicine and Health Promotion*
- *General Anaesthesia*
- *Regional Anaesthesia*
- *Resuscitation and Transfer*

Paediatric anaesthesia: key capabilities U to W

U	Provides safe general anaesthesia for ASA 1-3 children undergoing non-complex elective and emergency surgery aged 1- 5 years with direct supervision, and 5 years and above with distant supervision
V	Explains the principles of anaesthetic care for children of all ages with complex medical problems and/or requiring complex surgical procedures
W	Explains the principles of the general anaesthetic care of neonates

Examples of Evidence

- SLEs throughout stage of training in paediatric anaesthesia including out of hours work and experience in pre-operative assessment clinics.

Personal activities and reflections:

- simulation or other courses: paediatric anaesthesia.

Suggested supervision level

for ASA 1-3 children aged 1-5:

- 2a - supervisor in theatre suite, available to guide aspects of activity through monitoring at regular intervals

for children 5 years and above:

- 2b - supervisor within hospital for queries, able to provide prompt direction/assistance.

Cross links with other domains and capabilities

- *Perioperative Medicine and Health Promotion*

Key capability X

X	Uses total intravenous anaesthesia safely in all areas of clinical anaesthetic practice

Examples of Evidence

- SLEs from appropriate surgical specialties.

Suggested supervision level

- 2b - supervisor within hospital for queries, able to provide prompt direction/assistance.

Cross links with other domains and capabilities

- *General Anaesthesia*

Regional anaesthesia

Stage learning outcome

- *Performs a wider range of regional anaesthetic techniques*

Key capability A

A	Performs ultrasound-guided brachial plexus blocks

Examples of Evidence

- SLEs for appropriate cases (DOPS).

Personal activities and reflections:

- use of part-task simulator
- simulation or other courses: Use of ultrasound, regional anaesthesia.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance.

Cross links with other domains and capabilities

- *Safety and Quality Improvement*

Key capabilities B & C

B	Performs ultrasound-guided fascial plane blocks for the chest or abdominal wall
C	Demonstrates how to achieve an optimal ultrasound image and recognises common ultrasound artefacts

Examples of Evidence

- SLEs for appropriate cases (DOPS).

Personal activities and reflections:

- use of part-task simulator
- simulation or other courses: use of ultrasound, regional anaesthesia.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance.

Cross links with other domains and capabilities

- *Safety and Quality Improvement*

Key capability D

D	Describes ophthalmic blocks for patients undergoing awake ophthalmic surgery

Examples of Evidence

- SLEs for appropriate cases.

Personal activities and reflections:

- eLearning: ophthalmic regional anaesthesia.

Suggested supervision level

- not applicable.

Cross links with other domains and capabilities

- *General Anaesthesia*

Key capabilities E & F

E	Involves the patient in planning and understanding potential complications of regional anaesthesia
F	Assesses when a regional technique is not appropriate

Examples of Evidence

- SLEs throughout stage of training in a range of surgical specialties including obstetrics and experience in pre-operative assessment clinics.

Personal activities and reflections:

- attendance at pre-operative and obstetric anaesthesia clinics.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance.

Cross links with other domains and capabilities

- *Perioperative Medicine and Health Promotion*

Key capability G

G	Manages inadequate block in the awake patient and in recovery if used as an adjunct to general anaesthesia

Examples of Evidence

- SLEs throughout stage of training in a range of surgical specialties including obstetrics.

Personal activities and reflections:

- Pain rounds, post-natal follow up.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance.

Cross links with other domains and capabilities

- *General Anaesthesia*
- *Pain*

Key capability H

H	Describes the longer term management of complications of regional anaesthesia

Examples of Evidence

- SLEs throughout stage of training in a range of surgical specialties including obstetrics.

Personal activities and reflections:

- courses and eLearning: complications of regional anaesthesia, scientific meetings on regional anaesthesia.

Suggested supervision level

- not applicable.

Cross links with other domains and capabilities

Key capability I

I	Discusses the use of regional anaesthesia in the presence of abnormalities of coagulation

Examples of Evidence

- SLEs throughout stage of training in a range of surgical specialties including obstetrics.

Personal activities and reflections:

- review of local and national guidelines for regional anaesthesia in patients on anticoagulant drugs.

Suggested supervision level

- not applicable.

Cross links with other domains and capabilities

- *Safety and Quality Improvement*
- *Perioperative Medicine and Health Promotion*

Resuscitation and Transfer

Stage learning outcomes

Able to manage the on-going care of post-resuscitation patients.

Independently cares for critically ill adult patients during inter-hospital transfers by road

Key capabilities A & B

A	Leads a multidisciplinary resuscitation team from the initial assessment and management of a critically ill patient, through to handover to Critical Care or another specialist team
B	Maintains contemporary knowledge and skills required for the delivery of successful resuscitation

Examples of Evidence

- SLEs throughout stage of training including out of hours experience.

Personal activities and reflections:

- simulation courses: adult life support, trauma resuscitation, and transfer.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance.

Cross links with other domains and capabilities

- *Team Working*
- *Perioperative Medicine and Health Promotion*
- *General Anaesthesia*
- *Intensive Care*

Key capability C

C	Demonstrates resuscitation skills in neonates and children

Examples of Evidence

- SLEs throughout stage of training including out of hours experience.

Personal activities and reflections:

- simulation courses: neonatal resuscitation, paediatric life support.

Suggested supervision level

- 2b - supervisor within hospital for queries, able to provide prompt direction/assistance.

Cross links with other domains and capabilities

- *Intensive Care*

Key capability D

D	Undertakes discussions with patients, families and colleagues to aid decision making on resuscitation, including DNACPR 'do not attempt cardiopulmonary resuscitation' orders

Examples of Evidence

- SLEs throughout stage of training including out of hours experience.

Personal activities and reflections:

- medical ethics.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance.

Cross links with other domains and capabilities

- *Professional Behaviours and Communication*
- *Safeguarding*
- *Intensive Care*

Key capability E

E	Demonstrates knowledge and skills in resuscitation of the patient with major trauma

Examples of Evidence

- SLEs throughout stage of training including out of hours experience.

Personal activities and reflections:

- simulation courses: trauma resuscitation.

Suggested supervision level

- 2b - supervisor within hospital for queries, able to provide prompt direction/assistance.

Cross links with other domains and capabilities

- *General Anaesthesia*
- *Intensive Care*

Key capability F

F	Manages inter–hospital transfers of adults and children by land, including time-critical transfers, in line with local and regional policy

Examples of Evidence

- SLEs throughout stage of training including out of hours experience.

Personal activities and reflections:

- simulation courses: transfer.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance.

Cross links with other domains and capabilities

- *Intensive Care*

Key capability G

G	Manages the resuscitation, stabilisation and transfer of patients with acute neurological deterioration

Examples of Evidence

- SLEs throughout stage of training including out of hours experience.

Personal activities and reflections:

- simulation courses: trauma resuscitation, transfer

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance.

Cross links with other domains and capabilities

- *General Anaesthesia*
- *Intensive Care*

Procedural sedation

Stage learning outcome

Provides safe sedation to ASA 1 to 3 adults and children in any location within the hospital

Key Capabilities

A	Utilises appropriate sedation techniques by a variety of routes of administration and multiple drug combinations, including target-controlled infusions.
B	Utilises sedation protocols and scoring systems
C	Explains the risks of delivering sedation outside the operating theatre and acts to mitigate these risks
D	Recognises when the use of sedation is inappropriate and formulates an alternative safe plan

Examples of Evidence

- SLEs throughout stage of training in appropriate cases eg ophthalmic surgery, trauma, dentistry, endoscopy, Intensive Care, cardioversion.

Personal activities and reflections:

- courses and eLearning: sedation scoring
- knowledge of local sedation guidelines and protocols.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance

Cross links with other domains and capabilities

- *General Anaesthesia*
- *Resuscitation and Transfer*
- *Intensive Care*

Pain

Stage learning outcome

Understands the aetiology and management of acute, acute on chronic and chronic pain

Key capabilities A & B

A	Utilises a multi-disciplinary approach to the management of complex pain within a biopsychosocial model of care
B	Can confidently manage acute pain in the whole perioperative pathway in a timely manner

Examples of Evidence

- SLEs throughout stage of training across range of surgical specialties, acute pain ward rounds, and from specialist pain clinics
- examples: regional anaesthesia techniques for post-operative pain
- management plans for the transition to oral analgesia from PCA, neuraxial or regional anaesthesia techniques.

Personal activities and reflections:

- leading pain round
- attendance at specialist pain clinic
- biopsychosocial approach in pain management programmes and multidisciplinary reviews.

Suggested supervision level

- 3 - supervisor on call from home for queries able to provide directions via phone or non-immediate attendance

Cross links with other domains and capabilities

- *Professional Behaviours and Communication*
- *Team Working*
- *General Anaesthesia*
- *Regional Anaesthesia*

Key capabilities C to E

C	Is able to assess patients, interpret investigations and initiate management of chronic malignant and non-malignant pain in a timely manner under distant supervision
D	Can assess and manage acute on chronic and chronic in-patient pain in adults and recognise when referral to specialist pain services is appropriate
E	Identify barriers to effective pain management including those related to patient beliefs, society, culture, and healthcare provision

Examples of Evidence

- SLEs throughout stage of training across range of surgical specialties and from specialist pain clinics.

Personal activities and reflections:

- attendance at specialist pain clinic, pain intervention lists.

Suggested supervision level

- 2b - supervisor within hospital for queries, able to provide prompt direction/assistance.

Cross links with other domains and capabilities

- *Perioperative Medicine and Health Promotion*

Key capability F

F	Explains the risk factors for persistent post-surgical pain including measures to minimise its occurrence

Examples of Evidence

- SLEs throughout stage of training across range of surgical specialties and from specialist pain clinics.

Suggested supervision Level

- Not applicable.

Cross links with other domains and capabilities

- *Professional Behaviours and Communication*
- *Perioperative Medicine and Health Promotion*
- *General Anaesthesia*

Intensive Care

Stage learning outcome

Provides safe and effective care for critically ill patients with specialist help and guidance

Key capability A

A	Recognises the limitations of intensive care; employs appropriate admission criteria

Examples of Evidence

- SLEs throughout stage of training for relevant cases.

Suggested supervision level

- FICM capability level 3 (see below for details)
- supervision levels given for individual procedures in the Practical Procedures Grid.

Cross links with other domains and capabilities

- *Resuscitation and Transfer*

Key capability B

B	Performs safely and effectively the clinical invasive procedures required to maintain respiratory, cardiovascular and renal, support

Examples of Evidence

- SLEs throughout stage of training for relevant cases.

Suggested supervision level

- FICM capability level 3 (see below for details)
- supervision levels given for individual procedures in the Practical Procedures Grid.

Cross links with other domains and capabilities

- *Resuscitation and Transfer*

Key capability C

C	Recognises, assesses and initiates management for acutely ill adults across the spectrum of single or multiple organ failure

Examples of Evidence

- SLEs throughout stage of training for relevant cases
- simulation training including adult resuscitation courses.

Suggested supervision Level

- FICM capability level 3 (see below for details).

Cross links with other domains and capabilities

- *Resuscitation and Transfer*

Key capability D

D	Recognises the acutely ill child and initiates management of paediatric emergencies

Examples of Evidence

- SLEs throughout stage of training for relevant cases
- simulation training including paediatric resuscitation courses.

Suggested supervision Level

- FICM capability level 3 (see below for details).

Cross links with other domains and capabilities

- *Resuscitation and Transfer*

Key capability E

E	Recognises and manages the patient with sepsis and employs local infection control policies

Examples of Evidence

- WBAs throughout stage of training for relevant cases

Suggested supervision Level

- FICM capability level 3 (see below for details).

Cross links with other domains and capabilities

- *Resuscitation and Transfer*

Key capability F

F	Undertakes and evaluates laboratory and clinical imaging investigations to manage patients while critically ill during their intensive care stay

Examples of Evidence

- SLEs throughout stage of training for relevant cases.

Suggested supervision Level

- FICM capability level 3 (see below for details).

Cross links with other domains and capabilities

- *Resuscitation and Transfer*

Key capability G

G	Manages the medical / surgical needs and organ support of patients during their critical illness, including the holistic care of patients and relatives

Examples of Evidence

- SLEs throughout stage of training for relevant cases.

Suggested supervision Level

- FICM capability level 3 (see below for details).

Cross links with other domains and capabilities

- *Resuscitation and Transfer*

Key capability H

H	Plans and communicates the appropriate discharge of patients from intensive care to health care professionals, patients and relatives

Examples of Evidence

- SLEs throughout stage of training for relevant cases.

Suggested supervision Level

- FICM capability level 3 (see below for details).

Cross links with other domains and capabilities

- *Professional Behaviours and Communication*

Key capability I

I	Manages end of life care within the intensive care environment with patients, relatives and the multi-professional team

Examples of Evidence

- SLEs throughout stage of training for relevant cases.

Suggested supervision Level

- FICM capability level 2 (see below for details).

Cross links with other domains and capabilities

- *Perioperative Medicine and Health Promotion*

Key capability J

J	Liaises with transplant services when appropriate, can perform brain stem death testing and provides the physiological support of the donor

Examples of Evidence

- SLEs throughout stage of training for relevant cases
- simulation training
- personal activity and reflection: journal article, eLearning.

Suggested supervision Level

- FICM capability level 1 (see below for details).

Cross links with other domains and capabilities

- *Professional Behaviours and Communication*

Key capability K

K	Supports clinical staff outside the ICU to enable the early detection of the deteriorating patient

Examples of Evidence

- SLEs throughout stage of training for relevant cases.

Suggested supervision Level

- FICM capability level 2 (see below for details).

Cross links with other domains and capabilities

- *Resuscitation and Transfer*

FICM Capability Levels

Level	Task orientated capability	Knowledge orientated capability	Patient management capability
1	Performs task under direct supervision.	Very limited knowledge: requires considerable guidance to solve a problem within the area.	Can take history, examine and arrange investigations for straight forward case (limited differential diagnosis). Can initiate emergency management and continue a management plan, recognising acute divergences from the plan. Will need help to deal with these.
2	Performs task in straightforward circumstances, requires help for more difficult situations. Understands indications and complications of task.	Sound basic knowledge: requires some guidance to solve a problem within the area. Will have knowledge of appropriate guidelines and protocols.	Can take history, examine and arrange investigations in a more complicated case. Can initiate emergency management. In a straightforward case, can plan management and manage any divergences in short term. Will need help with more complicated cases.
3	Performs task in most circumstances, will need some guidance in complex situations. Can manage most complications, has a good understanding of contraindications and alternatives.	Advanced knowledge and understanding; only requires occasional advice and assistance to solve a problem. Will be able to assess evidence critically.	Can take history, examine and arrange investigations in a more complex case in a focused manner. Can initiate emergency management. In a most cases, can plan management and manage any divergences. May need specialist help for some cases.

Stage 2 practical procedures (with supervision levels)

These practical procedures should be completed as part of the curriculum.

It is anticipated that these are observed using the DOPS SLE although some might naturally be included within another SLE such as A-CEX or CBD.

		Supervision level for stage 2
Airway management	Insertion of supraglottic airway	3
	Intubation using standard laryngoscope	3
	Intubation using video laryngoscope	3
	Fibreoptic intubation	2a
	Intubation in the awake patient	2a
	Emergency front of neck access (simulation)	3
	Lung isolation technique (eg double lumen tube or bronchial blocker)	2a
CVS	Central venous line insertion	3
	Venous access line for renal replacement therapy	3
	Arterial line	3
	Ultrasound guided peripheral venous cannulation	3
Respiratory	Needle thoracocentesis (simulation)	3
	Chest drain insertion (simulation)	3
Regional Techniques	Lumbar epidural	3
	Low thoracic epidural	2b
	Spinal anaesthesia	3
	Combined spinal/epidural	3
	Simple peripheral nerve block	3
	Ultrasound guided chest wall plane block	3
	Ultrasound guided abdominal wall plane block	3
	Ultrasound guided lower limb block including femoral nerve block and fascia iliaca block	3
	Ultrasound guided upper limb block including brachial plexus block	3