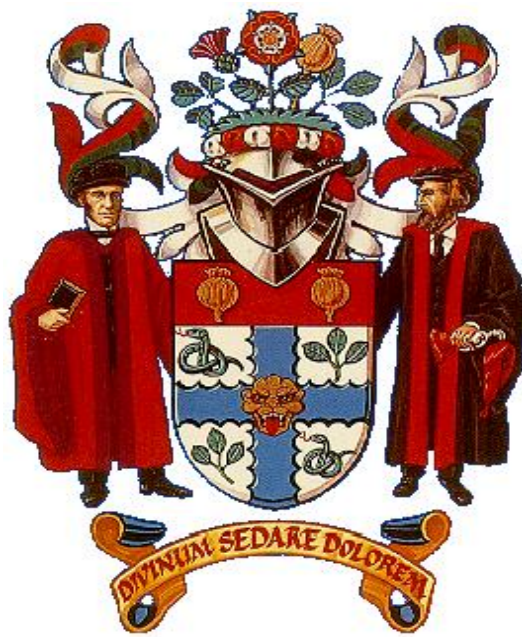


CCT in Anaesthetics

Advanced Level Training



Health Education England (West Midlands)

Training Guidebook

Guidance for Advanced Level Anaesthetic Trainees

Welcome to Health Education England (West Midlands) Schools of Anaesthesia

You have embarked on a five year Specialist Training Programme and hopefully a successful career in Anaesthesia. Your West Midlands trainers hope very much that you will enjoy the experience & challenges ahead.

Your training will be in one of the 3 schools:

- Birmingham School of Anaesthesia
- Warwickshire School of Anaesthesia
- Stoke School of Anaesthesia

CCT in Anaesthesia

The curriculum is divided into stages of training:

- | | | |
|----------------------------------|--------------------|-------------|
| • Introduction to Anaesthesia | First 3-6 months | CT1 |
| • Core Level Training | 6 months - 2 years | CT1 and CT2 |
| • Intermediate Level Training | Years 3 and 4 | ST3 and ST4 |
| • Higher Level Training | Years 5 and 6 | ST5 and ST6 |
| • Advanced Level Training | Year 7 | ST7 |

This work book covers the **Advanced Level Training**

General Guidance

- Trainees completing the 2010 curriculum will be expected to do a **minimum of one** unit of advanced training. If only General Duties advanced units are undertaken then **at least two units will be required**.
- Advanced training is the final preparation for independent practice and will normally occur in ST7. Flexibility is required to allow all trainees to complete their desired advanced units, such that some may commence during ST6.
- **Advanced modules cannot be undertaken in ST5.** (Without special permission from the postgraduate dean).
- At the end of higher training the trainee will be competent in all aspects of anaesthesia practice to that level and will have experience of most procedures and techniques. Trainees will not however have mastery of specialised, uncommon and difficult clinical work as they will have had little opportunity to develop special skills in an area of practice. The indicative year of full time advanced training allows this to occur and has two aims:
 - To develop mastery in specific special interest areas of practice
 - To extend the non-clinical skills needed for consultant practice
- This guidebook sets out the core learning outcomes required for each unit of training and the assessments that demonstrate achievement of these outcomes.
- Before commencing any of the Advanced units of training the **Higher training unit must be completed**.

Generic Domains of Advanced Training

By this stage of training, the vast majority of outcomes are generic across all areas of clinical practice in anaesthesia, intensive care and pain medicine. Thus they have been divided into the following 6 domains:

- clinical practice
- team working
- leadership
- innovation
- management
- education.

Most of the content of these domains is assessed in the Advanced units of training. To supplement this, attendance at a Leadership and Management Course (Keele) and the Stafford Professional Development days will provide the required evidence in order to complete the Domain Units of Training on the e-portfolio.

Completion of Units of Training

In order to complete a Unit of Training and sign off a CUT form on the eportfolio, the trainee must demonstrate:

- Achievement of all the Learning Outcomes
- Completion of WPBA's necessary set out in this workbook
- Logbook review
- MSF (if appropriate)
- Consultant Feedback

Certificates to be gained in this stage of training

- CCT – Certificate of Completion of Training
 - In combination with Higher Level Training

For further details regarding training in your School of Anaesthesia please visit your website

www.stokeanaesthesia.org.uk

www.thebsa.info

www.wsoa.org.uk

Guidance for Advanced Level Anaesthetic Trainees

Units of Training

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Advanced Level Anaesthetic Competencies

Domain 1 – Clinical Practice

Highly specific clinical competencies are not identified as each trainee's focus and career intention will be different and, in many cases, be dependent upon the availability of patients that present uncommon challenges; knowledge and skills are combined as this is most appropriate at the intended level of practice

Demonstrates mastery of all aspects of clinical care in all clinical situations regularly encountered in the chosen area of practice and shows clear understanding of: <ul style="list-style-type: none">• Why effective decision making, communication, team-working and organisation skills are required by anaesthetists to ensure clinical sessions are delivered safely, efficiently and effectively to the benefit of both patients and the organisation; this implies an ability to recognise the importance of providing overall leadership of the multi-disciplinary team when necessary• How to utilise the time allocated to clinical sessions effectively for patient care, without compromising safety• The central role human factors plays in developing a culture of safe practice and how collaboration and team-working enhances safety
Demonstrates and teaches safe behaviours in prescribing practice to all members of the multi-disciplinary team
Demonstrates and teaches how to obtain consent from patients in all situations showing compassion and understanding; this includes patients where there are difficulties with communication capacity
Demonstrates safe practice in clinical care in those <i>less common</i> clinical situations in the chosen area of practice where mastery has not yet been achieved
Shows mastery in some complex clinical situations when patients requiring difficult or dangerous interventions, providing advice to other team members and participating in the planning of complex procedures
Reflects on own clinical practice in order to achieve insight and: <ul style="list-style-type: none">• Strives to correct deficiencies identified• Seeks learning opportunities and integrates new knowledge into clinical practice
Identifies opportunities to promote changes in lifestyle and other actions which will improve health and/or disease outcomes positively
Provides appropriate advice to others regarding the proper management of clinical problems
Shows the necessary maturity to guide the choice of audit cycles/quality improvement projects in developing practice
Promptly acknowledges mistakes and mishaps and demonstrates the ability to lead in managing errors including: <ul style="list-style-type: none">• Talking to patients about untoward events, apologising appropriately, providing clear explanations acting with integrity and offering the necessary support• Leading de-briefs with all the staff involved• Implementing procedures to effect a full investigation• Openness and honesty at all times• The ability to learn from the errors and lead safety improvements to minimise likely recurrence

e-Portfolio WPBA	Minimum Number
A-CEX	1
ALMAT	1
CBD	1

Advanced Level Anaesthetic Competencies

Domain 2 – Team working

Trainees are expected to demonstrate the necessary team working, management and leadership skills required post-CCT for independent practice

Participates in [and leads when appropriate] the organisation of complex interventions, including liaison with clinicians, nurses, clinical support specialties and managers	
Demonstrates an ability to engage all members of the team, when required, to enable the session time to be used efficiently and effectively for the benefit of both the patients and the organisation; this implies an ability to lead the discussions in a timely and effective manner where/when necessary	
Recognises own limitations and actively seeks the advice of others when needed	
Commits to the principle that the patient and their relatives are often equal members of the clinical team	
Demonstrates leadership in engaging other healthcare professional and support workers positively and: <ul style="list-style-type: none">• Gives weight to contributions of others• Respects team decisions and is moderate in word and manner when necessarily registering their dissent• Understands that other team members may be experiencing strong emotions which must be recognised	
Always shows appropriate understanding and control of their emotions when working with others	
Understands the particular ways of working of the highly specialised teams in which they contribute	
Teaches others how to work properly in teams	
Demonstrates a desire to achieve high standards and monitors compliance to standards by the whole team	
Demonstrates the importance of maintaining high levels of individual and team situation awareness at all times; asks for, or shares, information and anticipates future problems to maximise safe practice	
Adopts strategies to reduce risk [e.g. the use of the WHO Safe Surgery Checklist] and a willingness to participate in improvement strategies [e.g. critical incident reporting]; acts to rectify error immediately if it is made	
Demonstrates openness when talking to patients about untoward events, apologising appropriately, providing clear explanations, acting with integrity and offering the necessary support	
Shows ability to learn from errors and shares that learning with the rest of the organisation	
e-Portfolio WPBA	Minimum Number
ALMAT	1

Attendance at the Stafford Professional Development days and a Leadership and Management course (Keele) provide training towards gaining this module.

Advanced Level Anaesthetic Competencies

Domain 3 – Leadership

Understands that the role of the consultant involves demonstrating leadership in clinical management, service delivery and forward planning
Is aware of their position as an important positive role-model for others
Demonstrates commitment to the highest clinical standards personally and encourages others to achieve the best
Shows flexibility in accommodating the needs and work patterns of others and a preparedness to work flexibly in order to allow cover of unpredictable duties [e.g. the unavoidable absence of a colleague] to maintain essential clinical care to patients
Able to take the lead where appropriate in dealing with difficulties that have arisen in the clinical care of patients including communicating bad news, participating in clinical review and liaising with managers and dealing with complaints
Creates opportunities to bring colleagues together to further clinical and institutional goals including reducing unnecessary resource usage [environmental and financial] in all healthcare
Demonstrates the ability to communicate clearly, promptly and effectively with colleagues by means appropriate to the urgency of the situation [e.g. personal presence, telephone, email, letter etc] and recognising its crucial importance when transferring responsibility for patient care [e.g. at handovers]
Analyses information about performance from a wide range of resources; participates in [and if appropriate initiates and leads] initiatives to improve performance

Attendance at the Stafford Professional Development days and a Leadership and Management course (Keele) provide training towards gaining this module.

Domain 4 – Innovation

Demonstrates understanding of the need to be aware of new trends and developments and; <ul style="list-style-type: none">• Questions the status quo• Actively looks for ways to improve clinical practice and the patient experience• Commits to the changing roles and responsibilities of healthcare groups as practice develops• Is receptive to the attempts of others to improve practice• Urges responsible individuals and groups to seek and implement beneficial change
Understands the importance of research [clinical and laboratory] in the development of clinical practice in their chosen area[s], is aware of current areas of research and achieves competence in understanding, and explaining, the methodology and statistics involved

Attendance at the Stafford Professional Development days and a Leadership and Management course (Keele) provide training towards gaining this module.

Advanced Level Anaesthetic Competencies

Domain 5 – Management

Commits to the objectives of their team, of their hospital and to the national planning of healthcare
Plans their work efficiently so that they can accomplish the targets they have set themselves and meet institutional objectives
Understands the central role of the patient and the public in determining directions and priorities in service development
Takes the initiative in: <ul style="list-style-type: none">• Demonstrating the efficient use of resources and encouraging others to do the same• Identifying and reporting any significant deficiency of resources• Contributing to discussions and planning for service and facilities development

Attendance at the Stafford Professional Development days and a Leadership and Management course (Keele) provide training towards gaining this module.

Domain 6 – Education

Continuously seeks to improve and update their knowledge and skills, using a variety of strategies, whilst keeping records of learning that are planned and undertaken, reflecting on their outcomes
Develops a personal learning network of individuals and organisations including; attending specialist educational meetings and reads specialist journals in special interest areas of practice
Is able to receive feedback appropriately for the purpose of self-improvement and provides feedback to others when asked
Commits to the supremacy of patient safety issues in providing an appropriate level of clinical or educational supervision
Actively participates in the planning and delivery of departmental teaching and training
Understands the roles and responsibilities of Clinical and Educational Supervisors; this includes: <ul style="list-style-type: none">• Understanding the assessment strategy employed by the RCoA• Committing to the importance of assessing and evaluating learning• Understanding the importance of providing timely, specific, non-judgemental and developmental feedback and is able to do so effectively• Understanding the role of and appropriate conduct of the workplace-based assessments and is able to perform accurately and reliably• Knowing how to raise concerns about a poorly performing trainee• Understanding the responsibilities of clinical trainers as defined by relevant national organisations and regulators
Understands the roles and responsibilities of educational agencies involved in educational commissioning and governance, GMC, DoH, Deaneries Colleges and NHS Education commissioners

Attendance at the Stafford Professional Development days and a Leadership and Management course (Keele) provide training towards gaining this module.

Anaesthesia for Neurosurgery, Neuroradiology & Neurocritical Care

Core Clinical Learning Outcomes

To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex neurosurgical and neuroradiological procedures independently; this implies an ability to:

- Provide perioperative anaesthetic care to a wide variety of neurosurgical & neuroradiological cases independently demonstrating a fundamental understanding of the problems encountered
- Show the decision making and organizational skills required of an anaesthetist to manage busy neurosurgery/neuroradiology sessions ensuring that the care delivered to patients is safe and timely, benefiting both the patient and the organisation
- Provide clinical input and leadership where required in neuro postoperative care units (including HDUs)
- To assist colleagues in decisions about the suitability of surgery in difficult situations.
- Provide advice to colleagues on the appropriate practice of regional anaesthesia

Unit Requirements

- Minimum of 20 clinical sessions Directly Supervised
- Minimum of 20 clinical sessions Indirectly Supervised
- WPBA's as indicated
- Consultant feedback (sought by the module lead from other neuro consultants)
- CUT form on e-Portfolio.

See next page for WPBAs relevant to Neuro Anaesthesia

Advanced Level Anaesthetic Competencies

Anaesthesia for Neurosurgery, Neuroradiology & Neurocritical Care (Cont.)

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Neuroradiology: Coiling of intracranial aneurysm	1
	Acoustic neuroma surgery	
	Complex spinal surgery involving instrumentation	
	Pre-operative assessment of a patient with co-morbidities for either complex cranial surgery or complex spinal surgery (usually performed in pre-op assessment clinic)	
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively	1
CbD	Neuroradiology case e.g. MR imaging or embolisation of an arteriovenous malformation	1
	Management in critical care of vasospasm after subarachnoid haemorrhage	
	Complex cranial surgery e.g. posterior fossa surgery in sitting position or clipping of an intracranial aneurysm	
	Management of raised intracranial pressure in critical care	
MSF	One during Advanced Neuro	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1

Advanced Level Anaesthetic Competencies

Cardiothoracic Anaesthesia and Cardiothoracic Critical Care

Core Clinical Learning Outcomes

To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex cardiothoracic surgical cases and cardiological procedures independently; this implies an ability to:

- Provide perioperative anaesthetic care to a wide-range of such cases demonstrating a fundamental understanding of the problems encountered
- Show the decision making and organizational skills required of an anaesthetist to manage busy cardiothoracic operating sessions ensuring that the care delivered to patients is safe and timely, benefiting both the patient and the organisation
- Assist colleagues in decisions about the suitability of surgery in difficult situations
- Provide teaching to less experienced colleagues of all grades

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Manage a complex case effectively	1
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively	1
CbD	Case description of trainee/trainer choice	1
MSF	One during Advanced Cardiac	1
Audit QI project	One during Advanced Cardiac training	1
Teaching	One during Advanced Cardiac training	1
Literature review and presentation	One during Advanced Cardiac training	1

Advanced Level Anaesthetic Competencies

Airway management

Core Clinical Learning Outcomes

To be capable of undertaking the perioperative airway and anaesthetic care for a wide variety of patients with complex airway problems independently; this implies an ability to:

- Perform fiberoptic intubation in all clinical situations where it is an essential part of safe airway care
- Show the decision making and organizational skills required of an anaesthetist to manage busy operating sessions that involve patients having major airway surgery and ensuring that the care delivered is safe and timely, benefiting both the patient and the organisation
- To assist colleagues in decisions about the suitability of surgery in difficult situations
- Provide teaching to less experienced colleagues of all grades

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Manage a complex airway case effectively	1
DOPS	Demonstrate mastery in performing fiberoptic intubation, awake or asleep, for an elective or emergency case with major airway pathology	1
MSF	One during the year of advanced general duties	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1

Advanced Level Anaesthetic Competencies

Head, neck, maxillo-facial and dental

Core Clinical Learning Outcomes

To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex ENT, maxillo-facial and dental surgical cases independently; this implies an ability to:

- Provide perioperative anaesthetic care to a wide-range of surgical cases performed [including those with thoracic extension, complex tumour resection and associated reconstruction [+/- free-flap], frequently requiring the ability to manage extremely complex airway problems], demonstrating a fundamental understanding of the problems encountered
- Show the decision making and organizational skills required of an anaesthetist to manage busy operating sessions that involve patients having major ENT, maxillo-facial and dental surgery and ensuring that the care delivered is safe and timely, benefiting both patients and the organisation
- To assist colleagues in decisions about the suitability of surgery in difficult situations
- Provide teaching to less experienced colleagues of all grades

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Manage a complex case effectively	1
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively	1
MSF	One during the year of advanced general duties	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1

Advanced Level Anaesthetic Competencies

General, urological and gynaecological surgery

Core Clinical Learning Outcomes

To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex abdominal surgical cases independently; this implies an ability to:

- Provide perioperative anaesthetic care to a wide-range of surgical cases performed [including those where pleural breach may occur], demonstrating a fundamental understanding of the problems encountered
- Show the decision making and organizational skills required of an anaesthetist to manage busy operating sessions that involve patients having major abdominal surgery and ensuring that the care delivered is safe and timely, benefiting both the patient and the organisation
- Assist colleagues in decisions about the suitability of surgery in difficult situations
- Provide teaching to less experienced colleagues of all grades

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively	1
MSF	One during the year of advanced general duties	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1

Advanced Level Anaesthetic Competencies

Hepatobiliary surgery

Core Clinical Learning Outcomes

To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex hepatobiliary surgical cases independently; this implies an ability to:

- Provide perioperative anaesthetic care to a wide-range of surgical cases performed, demonstrating a fundamental understanding of the problems encountered
- Show the decision making and organizational skills required of an anaesthetist to manage busy operating sessions that involve patients having major hepatobiliary surgery and ensuring that the care delivered is safe and timely, benefiting both the patient and the organisation
- Assist colleagues in decisions about the suitability of surgery in difficult situations
- Provide teaching to less experienced colleagues of all grades

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Hepatic resection	1
	Orthotopic liver transplantation	
	Major hepatobiliary case such as Whipple's pancreaticoduodenectomy or biliary reconstruction	
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively	1
CbD	Case description of trainee/trainer choice	1
MSF	One during the year of advanced general duties	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1

Advanced Level Anaesthetic Competencies

Vascular

Core Clinical Learning Outcomes

To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex vascular cases independently; this implies an ability to:

- Provide perioperative anaesthetic care to a wide range of cases in and out of theatre [including those where supra renal or thoracic aortic cross clamping occurs], demonstrating a fundamental understanding of the problems encountered
- Show the decision making and organizational skills required of an anaesthetist to manage busy clinical sessions that involve patients having major vascular procedures, ensuring that the care delivered is safe and timely, benefiting both the patient and the organisation
- To assist colleagues in decisions about the suitability of surgery in difficult situations
- Provide teaching to less experienced colleagues of all grades

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Carotid endarterectomy	1
	Open repair of abdominal aortic aneurysm	
	EVAR	
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively	1
CbD	Case description of trainee/trainer choice	1
MSF	One during the year of advanced general duties	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1

Advanced Level Anaesthetic Competencies

Day surgery

Core Clinical Learning Outcomes

- To be capable of undertaking the perioperative management of a wide range of patients for day case procedures including those with co-morbidities independently
- Show the decision making and organizational skills required of an anaesthetist to manage a busy day surgery session ensuring that the care delivered is safe and timely, benefiting both the patient and the organisation
- Show the organisational and team working skills to lead and manage a day surgery unit in conjunction with the other members of the multi-disciplinary team
- Assist colleagues in decisions about the suitability of surgery in difficult situations
- Provide teaching to less experienced colleagues of all grades

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Demonstrate mastery in the assessment and decision making of fitness for complex day surgical cases, particularly those with patients with significant co-morbidities	1
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively	1
MSF	One during the year of advanced general duties	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1

Advanced Level Anaesthetic Competencies

Sedation and conscious sedation for dentistry

Core Clinical Learning Outcomes

To be capable of delivering safe and effective peri-procedural conscious sedation to patients requiring a wide variety of complex investigative/treatment procedures independently; this implies an ability to:

- Provide safe and effective sedation using a wide variety of techniques to best effect for patients and the organisation, demonstrating a fundamental understanding of the problems encountered
- Show the decision making and organizational skills required of an anaesthetist to manage patients requiring sedation in remote locations
- To assist colleagues in decisions about the suitability of [frequently] invasive investigative/treatment procedures in difficult situations
- Provide teaching to less experienced colleagues of all grades

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Manage a complex case effectively	1
MSF	One during the year of advanced general duties	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1

Advanced Level Anaesthetic Competencies

Orthopaedic surgery

Core Clinical Learning Outcomes

To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex orthopaedic cases [including major spinal cases +/- pleural breach] and list management independently; this implies an ability to:

- Provide perioperative anaesthetic care to a wide-range of surgical cases demonstrating a fundamental understanding of the problems encountered
- Show the decision making and organizational skills required of an anaesthetist to manage busy operating sessions that involve patients having major orthopaedic surgery and ensuring that the care delivered is safe and timely, benefiting both the patient and the organisation
- To assist colleagues in decisions about the suitability of surgery in difficult situations
- Provide teaching to less experienced colleagues of all grades

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Demonstrates maturity in the decision making, clinical reasoning and clinical leadership skills required to engage appropriately with colleagues in the multi-disciplinary team, so providing high quality, safe strategy, perioperative anaesthetic care for a complex elective or emergency orthopaedic procedure	1
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively	1
MSF	One during the year of advanced general duties	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1

Advanced Level Anaesthetic Competencies

Regional

Core Clinical Learning Outcomes

To be capable of undertaking a wide variety of regional anaesthetic techniques independently; this implies an ability to:

- Provide perioperative anaesthetic care to a wide-range of surgical cases performed under regional anaesthesia, demonstrating a fundamental understanding of the problems encountered
- Show the decision making and organizational skills required of an anaesthetist to manage busy operating sessions that involve patients having regional anaesthesia as part of their anaesthetic planned care
- Assist colleagues in decisions about the use of regional anaesthesia in difficult situations and where their use might be controversial
- Provide teaching to less experienced colleagues of all grades
- Provide advice to colleagues on the appropriate practice of regional anaesthesia

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Demonstrates the use of advanced ultrasound techniques	1
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively	1
DOPS	Interscalene, supraclavicular, infraclavicular and axillary approaches to the brachial plexus	1
	Thoracic paravertebral and interpleural blocks	
	Lumbar plexus and combined lumbar plexus and sciatic blocks	
	Initial placement and use of indwelling catheters	
MSF	One during the year of advanced general duties	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1

Advanced Level Anaesthetic Competencies

Trauma and stabilisation

Core Clinical Learning Outcomes

To be capable of leading the clinical care of the multiply injured patient from reception in the emergency department independently; this implies an ability to:

- Provide leadership in the discussions with the emergency services managing the multiply injured patient at the site of injury through to arrival in the Emergency Department
- Demonstrates good interpersonal skill, assertiveness [when needed] and leadership as Trauma Team Leader when leading the multi-disciplinary team that receives, assesses and delivers the necessary definitive care to the patient
- Provides safe and effective anaesthetic care for a wide-range of complex cases including challenging head, airway, neck and spine, chest, abdominal, spinal, pelvic and limb, soft tissue and vascular trauma in both adults and children, demonstrating a fundamental understanding of the problems encountered
- Show the decision making, organizational and communication skills required of a trauma team leader to manage a busy receiving area for patients with multiple injuries, ensuring that the care delivered is safe and timely, benefiting both the patient and the organisation
- Assist colleagues in decisions about the suitability of surgery/further definitive care in difficult situations

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

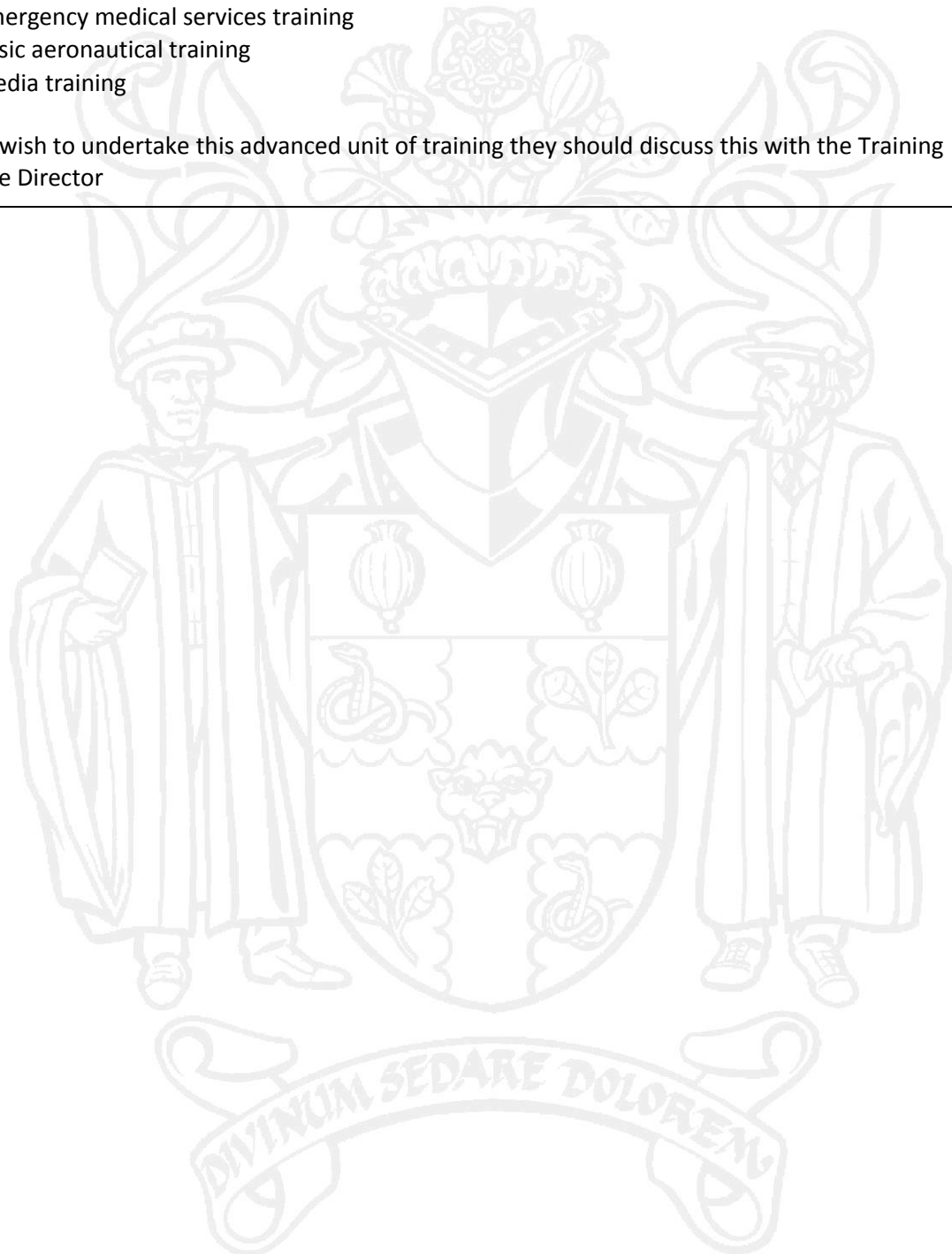
e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Demonstrates ability to lead a multi-disciplinary trauma team, co-ordinating and delivering the early hospital care of all types of complex multiply-injured patients including, initial resuscitation and imaging, peri-operative care and appropriate HDU/ICU admission	1
MSF	One during the year of advanced general duties	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1

Transfer Medicine and Emergency Medical Retrieval

This unit of training is aimed at those trainees with a specialist interest in transfer medicine and retrieval of patients requiring international transfer. It is expected that trainees will have completed the higher Trauma/Stabilisation units along with specialised training in the following as part of this unit:

- Pre-hospital training
- Emergency medical services training
- Basic aeronautical training
- Media training

If trainees wish to undertake this advanced unit of training they should discuss this with the Training Programme Director



Advanced Level Anaesthetic Competencies

Intensive Care Medicine

Please refer to the Faculty of Intensive Care Medicine (FICM) for guidance



Advanced Level Anaesthetic Competencies

Obstetrics

Core Clinical Learning Outcomes

To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex obstetric cases and list management independently; this implies an ability to:

- Provide perioperative anaesthetic care to a wide-range of obstetric cases performed both in the labour ward and theatre, demonstrating a fundamental understanding of the problems encountered
- Show the decision making and organizational skills required of an anaesthetist to manage busy labour ward and operating sessions, ensuring that the care delivered is safe and timely, benefiting both patients and the organisation
- To assist colleagues in decisions about the suitability of surgery in difficult situations
- Provide teaching to less experienced colleagues of all members of the multi-disciplinary team

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Manage a complex case effectively	1
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively, managing the work load on the Delivery Suite.	1
CbD	Case description of trainee/trainer choice	1
MSF	One during the Advanced Obs	1
Audit QI project	One during Advanced Obs training	1
Teaching	One during Advanced Obs training. Anaesthetic Trainees, Midwives or Parents.	1
Literature review and presentation	One during Advanced Obs training	1
Other Activities	Attendance at high risk antenatal assessment clinic	1
	Attendance at ultrasound/doppler assessment clinic	1
	Labour ward forum meeting	1

Advanced Level Anaesthetic Competencies

Paediatrics

Advanced Paediatric training within the Stoke School is conducted at BCH and is for a period of 6 months. It is aimed at the trainee wishing to work as a lead anaesthetist in paediatric anaesthesia in a DGH setting.

BCH have their own documentation of requirements for the Advanced Module which can be accessed from the College Tutor at BCH.

Core Clinical Learning Outcomes

To be capable of undertaking the perioperative anaesthetic care for a wide variety of paediatric procedures performed in the DGH environment independently; this implies an ability to:

- Provide perioperative anaesthetic care to a wide-range of such cases demonstrating a fundamental understanding of the problems encountered
- Show the decision making and organisational skills required of an anaesthetist to manage busy paediatric surgical/procedural sessions ensuring that the care delivered to patients is safe and timely, benefiting both the patient and the organisation
- Communicate compassionately and effectively with children and young people, parents and other carers and members of the multidisciplinary team
- Assist colleagues in decisions about the suitability of surgery in difficult situations
- Provide teaching to less experienced colleagues of all grades

Unit Requirements

- WPBA's, QI activity, Teaching etc, as indicated in BCH paperwork
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

It is suggested that those wishing to pursue a career as a specialist paediatric anaesthetist in a tertiary center will need to have at least 12 months additional clinical training in paediatric anaesthesia and that some of this time (up to three months in a twelve month period) should be spent in PICU. This is normally conducted as a Fellowship, most often post CCT.

Advanced Level Anaesthetic Competencies

Paediatric Intensive Care Medicine

See Advanced Paediatrics above.

Any Paediatric ICM conducted at BCH or elsewhere will utilise the guidance and paperwork of the hospital that it is conducted in.

Core Clinical Learning Outcomes

- To know the core differences in physiology, anatomy and pharmacology between infants, children and adults
- To recognise the signs and symptoms of clinical deterioration in infants and children which might lead to a PICU admission, including knowledge of paediatric early warning scores
- To institute, as a member of a skilled team, appropriate resuscitative measures to manage acute deterioration and stabilise the critically ill or injured child prior to transfer to a PICU
- To understand the principles and hazards of referring and transferring, when appropriate (eg acutely deteriorating head injury) a critically ill or injured paediatric patient to an appropriate referral centre for further management.
- To understand advanced monitoring techniques including but not limited to arterial and central venous pressure monitoring [including umbilical], EEG, central venous saturation, echocardiography, ultrasound
- To understand advanced organ support techniques amongst which are line placement, inhaled nitric oxide administration, High frequency oscillation, renal support (peritoneal dialysis and haemofiltration and dialysis), knowledge of ECMO and its indications and complications, intracranial pressure monitoring
- To understand the ethics and law of paediatric medical care, and in particular knowledge of child protection matters
- To understand the approach to brain death and organ donation in children

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

Advanced Level Anaesthetic Competencies

Pain Medicine

Core Clinical Learning Outcomes

To be capable of delivering all aspects of pain medicine as an independent practitioner. This implies:

- Having a comprehensive knowledge of Pain Medicine service delivery
- Being able to assess a wide variety of patients with pain using a biopsychosocial model including, history taking, physical examination, psychological assessment and interpretation of investigations
- Being aware of the treatment options available to provide effective management for patients with acute, chronic and cancer pain
- Becoming technically proficient in a range of procedures for Pain Medicine
- Having the communication and organisational skills to be an effective member of the multi-disciplinary Pain Medicine team
- Demonstrates empathy when caring for patients with pain
- Providing clinical leadership in the development of comprehensive pain medicine services, for the benefit of both patients and the organisation
- Acting as an effective teacher of Pain Medicine topics
- Being able to assess evidence from research related to Pain Medicine

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Manage a complex case effectively	1
CBD	Case description of trainee/trainer choice	1
DOPS	Procedure of trainee/trainer choice	1
MSF	One during the Advance Pain	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1

Advanced Level Anaesthetic Competencies

Perioperative Medicine

Core Clinical Learning Outcomes

- To gain expertise in the clinical management of patients in the preoperative, intraoperative and both immediate and longer term postoperative periods.
- To develop the expertise to take a lead in decision making about the suitability of high risk patients for surgery.
- To develop the skills required to manage perioperative services, ensuring that the care delivered is safe and timely, benefiting both patients and the organisation.
- To provide teaching to colleagues of all grades and specialties.
- To develop local services and practice through the use of appropriate quality improvement projects.
- To ensure that perioperative services are fully integrated, consistent, and reliable and make efficient use of resources.
- To work effectively in partnership with colleagues in other disciplines, including primary care.

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Develops appropriate individualized perioperative plans for complex patients	1
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively	1
CbD	Demonstrate an in-depth knowledge of preoperative optimisation of acute and chronic co-morbidity using an evidence based approach	1
MSF	One during the year of advanced general duties	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1

Advanced Level Anaesthetic Competencies

Plastics / Burns

Core Clinical Learning Outcomes

To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex plastics and burns cases independently; this implies an ability to:

- Manage perioperative anaesthetic care for highly complex plastics and burns cases independently [including major reconstructive surgery] demonstrating a fundamental understanding of the problems encountered
- Show the decision making and organizational skills required of an anaesthetist to manage busy operating sessions that involve patients having major plastics and burns surgery ensuring that the care delivered is safe and timely, benefiting both the patient and the organisation
- To assist colleagues in decisions about the suitability of surgery in difficult situations
- Provide teaching to less experienced colleagues of all grades
- Anaesthetise adult patients for major burns excision & grafting surgery independently

Unit Requirements

- WPBA's as indicated
- Consultant feedback (sought by the module lead from other consultants)
- CUT form on e-Portfolio

e-Portfolio WPBA	Index Case(s)	Minimum Number
A-CEX	Manage a complex case effectively	1
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively	1
CbD	Case description of trainee/trainer choice	1
MSF	One during the year of advanced general duties	1
Audit QI project	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1
Literature review and presentation	One during the year of advanced training, ideally relevant to the main specialty interest of the trainee	1