



**WARWICKSHIRE**  
SCHOOL OF ANAESTHESIA

**Advanced Level Training**

**CCT in Anaesthetics**

**2010 Curriculum**

**Guidebook**

## Contents

1. Message from the Training Programme Director
2. Contacts
3. Guidance
4. Advanced Modules
5. Anaesthetic List Management Assessment Tool (ALMAT)



## Message from the Training Programme Director

Hello,

This guide was initially developed by trainees from the Birmingham School to make navigating the Curriculum easier.

It does not replace the e-portfolio, but is to be used alongside it and serves as a guideline to the type of WPBA to be used as evidence.

Please contact me if you have any queries regarding your training.

A handwritten signature in black ink, appearing to read 'Martina Bieker', with a horizontal line underneath.

Martina Bieker

[martina.Bieker@heartofengland.nhs.uk](mailto:martina.Bieker@heartofengland.nhs.uk)

## Contacts

Training Programme Director: Martina Bieker  
Birmingham Heartlands Hospital  
[martina.bieker@heartofengland.nhs.uk](mailto:martina.bieker@heartofengland.nhs.uk)

Hospital	College Tutor	Admin
University Hospital Coventry and Warwickshire (UHCW)	Andy Kelly <a href="mailto:andrew_kelly@mac.com">andrew_kelly@mac.com</a> Danha Ratidzo <a href="mailto:Ratidzo.Danha@uhcw.nhs.uk">Ratidzo.Danha@uhcw.nhs.uk</a>	
Birmingham Heartlands Hospital (BHH)	Nicola Osborn <a href="mailto:Nicola.osborn@heartofengland.nhs.uk">Nicola.osborn@heartofengland.nhs.uk</a> Ebrahim Hozefa <a href="mailto:hozefa.ebrahim@heartofengland.nhs.uk">hozefa.ebrahim@heartofengland.nhs.uk</a>	Jayne Cross <a href="mailto:Jayne.cross@heartofengland.nhs.uk">Jayne.cross@heartofengland.nhs.uk</a>
Good Hope Hospital Sutton Coldfield (GHH)	Naresh Sandur <a href="mailto:sandur.naresh@heartofengland.nhs.uk">sandur.naresh@heartofengland.nhs.uk</a>	
The Alexandra Hospital, Redditch (Red)	Cindy Persad <a href="mailto:Cindy.Persad@worcsacute.nhs.uk">Cindy.Persad@worcsacute.nhs.uk</a>	
George Elliott Hospital Nuneaton (GEH)	Kausik Dasgupta <a href="mailto:Kausik.Dasgupta@geh.nhs.uk">Kausik.Dasgupta@geh.nhs.uk</a>	
Warwick Hospital, Warwick (War)	Ratty Shanmugam <a href="mailto:Rathinavel.Shanmugam@swft.nhs.uk">Rathinavel.Shanmugam@swft.nhs.uk</a>	<a href="mailto:Anita.Turvey@swft.nhs.uk">Anita.Turvey@swft.nhs.uk</a> . Phone: 01926495321.ext-4783.
Birmingham Children's Hospital (BCH)	Janet Stansfield <a href="mailto:Janet.Stansfield@bch.nhs.uk">Janet.Stansfield@bch.nhs.uk</a>	Sue Spargo <a href="mailto:Sue.Spargo@bch.nhs.uk">Sue.Spargo@bch.nhs.uk</a>

Warwickshire School of Anaesthesia Website: [www.wsoa.org](http://www.wsoa.org)

Training Programme Director for Core Training: Robin Correa ([robin.correa@uhcw.nhs.uk](mailto:robin.correa@uhcw.nhs.uk))

Training Programme Director for Intensive Care Training: Mamta Patel  
([mamta.patel@swbh.nhs.uk](mailto:mamta.patel@swbh.nhs.uk))

## Guidance

1. Trainees completing the 2010 curriculum will be expected to do a minimum of one unit of advanced training.
2. Advanced training is the final preparation for independent practice and will normally occur in ST year 7; flexibility is required to allow all trainees to complete their desired advanced units, such that some may commence during ST year 6. Advanced modules cannot be undertaken in ST5.
3. 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
4. This guidebook sets out the core learning outcomes required for each unit of training and the assessments that demonstrate achievement of these outcomes.
5. All assessments should be completed on e-Portfolio.
6. At the end of each Unit of Training a 'Completion of Unit of Training' (CUT) form should be signed on e-Portfolio by the supervising module consultant. Upon signing this form, indicated Core Clinical Learning Outcomes have been achieved.
7. A Multi Source Feedback form should be completed annually on e-Portfolio.

## Additional Points

1. Before commencing advanced training in any of the following units of training the higher training unit must be completed.
2. The Advanced Training curriculum includes the six domains of clinical practice:

<b>clinical practice</b>	<b>innovation</b>
<b>team working</b>	<b>management</b>
<b>leadership</b>	<b>education.</b>

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.

## **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. You are then required to have a formal meeting every three months until the end of your placement. If you work in more than one trust during a training year you need to complete an Interim Progress Report (IPR) each time you leave a trust, in the final trust you are at before your ARCP you need to complete an ESSR form.

### **ePortfolio requirements to document supervision.**

#### Yearly

- Declaration of health
- Declaration of probity
- Learning agreement
- ESSR form (complete prior to ARCP)
- MSF

#### Initial meeting with your supervisor

- Discuss/set PDP
- Upload copy of initial meeting with supervisor form

#### Three monthly until the end of your placement

- Review & sign off PDPs as appropriate
- Upload copy of meeting with supervisor form

#### End of placement

- Discuss/set PDP
- Form 5 (GMC Appraisal Document)
- Upload copy of final meeting with supervisor form
- HEPR if not the last trust you will work in before your next ARCP



<b>Advanced Training Domains</b>	
Domain 1 -	Clinical Practice
Domain 2 -	Team Working
Domain 3 -	Leadership
Domain 4 -	Innovation
Domain 5 -	Management
Domain 6 -	Education
<b>Units of training</b>	
General Duties	
	Airway management
	Head, neck, maxillo-facial and dental
	General, urological and gynaecological surgery
	Hepatobiliary surgery
	Vascular
	Day surgery
	Sedation and conscious sedation for dentistry
	Orthopaedic surgery
	Regional
	Trauma and stabilisation
	Transfer medicine
Thoracic anaesthesia	
Cardiac and cardiothoracic critical care	
Anaesthesia for neurosurgery, neuroradiology and neuro critical care	
Obstetrics	
Pain Medicine	
Paediatrics	
Paediatric intensive care medicine	
Perioperative medicine	
Plastics/Burns	
Intensive care medicine	

## **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"> <li>• 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</li> <li>• How to utilise the time allocated to clinical sessions effectively for patient care, without compromising safety</li> <li>• The central role human factors plays in developing a culture of safe practice and how collaboration and team-working enhances safety</li> </ul>	
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"> <li>• Strives to correct deficiencies identified</li> <li>• Seeks learning opportunities and integrates new knowledge into clinical practice</li> </ul>	
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"> <li>• Talking to patients about untoward events, apologising appropriately, providing clear explanations acting with integrity and offering the necessary support</li> <li>• Leading de-briefs with all the staff involved</li> <li>• Implementing procedures to effect a full investigation</li> <li>• Openness and honesty at all times</li> <li>• The ability to learn from the errors and lead safety improvements to minimise likely recurrence</li> </ul>	
e-Portfolio WPBA	
	Minimum Number
A-CEX	1
ALMAT	1
CBD	1



## 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"> <li>• Gives weight to contributions of others</li> <li>• Respects team decisions and is moderate in word and manner when necessarily registering their dissent</li> <li>• Understands that other team members may be experiencing strong emotions which must be recognised</li> </ul>	
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	
<b>e-Portfolio WPBA</b>	<b>Minimum Number</b>
ALMAT	1

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

## 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"> <li>• Questions the status quo</li> <li>• Actively looks for ways to improve clinical practice and the patient experience</li> <li>• Commits to the changing roles and responsibilities of healthcare groups as practice develops</li> <li>• Is receptive to the attempts of others to improve practice</li> <li>• Urges responsible individuals and groups to seek and implement beneficial change</li> </ul>
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.

## 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"> <li>• Demonstrating the efficient use of resources and encouraging others to do the same</li> <li>• Identifying and reporting any significant deficiency of resources</li> <li>• Contributing to discussions and planning for service and facilities development</li> </ul>

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"> <li>• Understanding the assessment strategy employed by the RCoA</li> <li>• Committing to the importance of assessing and evaluating learning</li> <li>• Understanding the importance of providing timely, specific, non-judgemental and developmental feedback and is able to do so effectively</li> <li>• Understanding the role of and appropriate conduct of the workplace-based assessments and is able to perform accurately and reliably</li> <li>• Knowing how to raise concerns about a poorly performing trainee</li> <li>• Understanding the responsibilities of clinical trainers as defined by relevant national organisations and regulators</li> </ul>
Understands the roles and responsibilities of educational agencies involved in educational commissioning and governance, GMC, DoH, Deaneries Colleges and NHS Education commissioners

## General Duties

There are eleven units that form the broad advanced level general duties 'block'. It is anticipated that most trainees will wish to spend twelve months completing the minimum learning outcomes in several of the units of training identified within this broad 'block'. The College recognises that some trainees may wish to combine six months of one of the other identified advanced level units [e.g. obstetrics or plastics and burns], with six months completing some units from within general duties. Any such combinations are encouraged to allow trainees as much flexibility as possible, whilst taking account of the needs of the NHS.

Trainees opting for twelve months of advanced level general duties are expected to choose a selection of the units available, as it will be impossible to have gained all the advanced learning outcomes in an indicative twelve month period. Trainees will however, be expected to complete a minimum of two of the units and it is anticipated that the vast majority will complete more than this as many have overlapping competencies [e.g. airway management and ENT, maxillo-facial and dental; orthopaedics and regional anaesthesia; general urological and gynaecological surgery and hepatobiliary].

The exact combination, and number, of units each trainee decides to include in their chosen year should be made following discussions with the TPD, RA, College Tutors and Educational Supervisors

The eleven units that make up the advanced general duties unit are:

1. *Airway management*
2. *ENT, maxillo-facial and dental surgery*
3. *General, urological and gynaecological surgery*
4. *Hepato-biliary surgery*
5. *Vascular surgery*
6. *Day surgery*
7. *Sedation*
8. *Orthopaedic surgery*
9. *Regional*
10. *Trauma and stabilisation*
11. *Transfer medicine*

## Assessments for General Duties

Trainees who do one year of advanced level general duties will be expected to do a minimum of one audit, one presentation, one MSF and one formal teaching session for the whole year. These should preferably be in the main specialty interest of the trainee. For each unit undertaken trainees must do one CBD, one ALMAT and must achieve the core learning outcomes.

## Advanced modules at the following hospitals

<b>UHCW</b>	Trauma, Vascular, Obstetrics, Airway, Teaching, ICM
<b>BHH</b>	Obstetrics, Thoracic, Vascular, ICM
<b>BCH</b>	Paediatrics
<b>UHB</b>	Offer most modules – 3 posts available for 6 months
<b>Redditch</b>	Regional anaesthesia



## Advanced Airway Management

### Core Clinical Learning Outcomes

1. Provide perioperative anaesthetic care to a wide variety of patients with complex airway problems independently demonstrating a fundamental understanding of the problems encountered
2. Show the decision making and organizational skills required of an anaesthetist to manage busy operating sessions that involve patients having major airway surgery ensuring that the care delivered to patients is safe and timely, benefiting both the patient and the organisation
3. Mastery in performing fiberoptic intubation, awake and asleep, for elective & emergency cases where it is an essential part of safe airway care
4. Assist colleagues in decisions about the suitability of surgery in difficult situations
5. 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 working with you)
- CUT form on e-Portfolio.

e-Portfolio WPBA	Requirements (Please complete details and upload on e-Portfolio)	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 Completion	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Literature Review and Presentation	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1



## Advanced ENT/Maxillo-facial/Dental Surgery

### Core Clinical Learning Outcomes

1. Provide perioperative anaesthetic care to a wide-range of ENT/MaxFax/Dental surgical cases independently [including those with thoracic extension, complex tumour resection and associated reconstruction frequently requiring the ability to manage extremely complex airway problems], demonstrating a fundamental understanding of the problems encountered
2. 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
3. Assist colleagues in decisions about the suitability of surgery in difficult situations
4. 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 working with you)
- CUT form on e-Portfolio.

e-Portfolio WPBA	Requirements (Please complete details and upload on e-Portfolio)	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
Audi/Qlt Completion	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Literature Review and Presentation	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1



## Advanced General, urological and gynaecological surgery

### Core Clinical Learning Outcomes

1. Gain mastery in the delivery of safe and effective perioperative anaesthetic care to patients undergoing complex intra-abdominal surgical procedures including those where pleural breach is anticipated
2. 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
3. Assist colleagues in decisions about the suitability of surgery in difficult situations
4. 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 working with you)
- CUT form on e-Portfolio.

e-Portfolio WPBA	Requirements (Please complete details and upload on e-Portfolio)	Minimum Number
CbD	Case description of trainee/trainer choice	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 Completion	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Literature Review and Presentation	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1



## Hepatobiliary Surgery – Advanced Module

### Core Clinical Learning Outcomes

1. Provide perioperative anaesthetic care to a wide-range of surgical cases performed, demonstrating a fundamental understanding of the problems encountered
2. 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
3. Assist colleagues in decisions about the suitability of surgery in difficult situations
4. 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 working with you)
- CUT form on e-Portfolio.

e-Portfolio WPBA	Requirements (Please complete details and upload on e-Portfolio)	Minimum Number
CbD	Case description of trainee/trainer choice	1
A-CEX	Hepatic resection	3
	Orthotopic liver transplantation	
	Major hepatobiliary case such as Whipple's pancreaticoduodenectomy or biliary reconstruction	
DOPS	Insertion of pulmonary artery catheter (this is a transferable skill from other units of training)	1
ALMAT	Be an effective member of the MDT	1
MSF	One during the year of advanced general duties	1
Audit/QI Completion	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Literature Review and Presentation	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1



## Advanced Vascular surgery

### Core Clinical Learning Outcomes

1. 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
2. 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
3. To assist colleagues in decisions about the suitability of surgery in difficult situations
4. 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 working with you)
- CUT form on e-Portfolio.
- The Vascular Anaesthesia Society suggests spending a year on an advanced vascular module

e-Portfolio WPBA	Requirements (Please complete details and upload on e-Portfolio)	Minimum Number
CbD	Case description of trainee/trainer choice	1
A-CEX	Carotid endarterectomy	3
	Open repair of abdominal aortic aneurysm	
	EVAR	
DOPS	Cervical block for carotid endarterectomy	1
ALMAT	Be an effective member of the MDT	1
MSF	One during the year of advanced general duties	1
Audit/QI Completion	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Literature Review and Presentation	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1



## Advanced Day Surgery

### Core Clinical Learning Outcomes

1. To be capable of undertaking the perioperative management of a wide range of patients for day case procedures including those with co-morbidities independently.
2. 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
3. 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
4. Assist colleagues in decisions about the suitability of surgery in difficult situations
5. 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 working with you)
- CUT form on e-Portfolio.

e-Portfolio WPBA	Requirements (Please complete details and upload on e-Portfolio)	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 cases effectively.	1
MSF	One during the year of advanced general duties	1
Audit/QI Completion	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Literature Review and Presentation	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1



## Conscious Sedation in Dentistry

This optional unit of training should only be undertaken once the higher unit of conscious sedation has been completed.

If trainees wish to undertake this advanced unit of training they should discuss this with their Training Program Director as there are opportunities within the School.

A-CEX	Manage a complex case effectively	1
ALMAT	Be an effective member of the MDT, managing elective cases effectively.	1
MSF	One during the year of advanced general duties	1
Audit/QI Completion	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Teaching	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1
Literature Review and Presentation	One during the year of advanced general duties, ideally relevant to the main specialty interest of the trainee	1

## Advanced Orthopaedics

### 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 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
- Trainees completing advanced level regional anaesthesia are encouraged to attend a theoretical course on the use of ultrasound in regional anaesthesia.

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 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 their Training Programme Director

## **Advanced Modules not included in General Duties**

The following advanced modules are usually completed within a six month dedicated module.

- Thoracic Anaesthesia
- Cardiac Anaesthesia
- Neuroanaesthesia
- Obstetric Anaesthesia
- Pain Management
- Paediatrics
- Perioperative Medicine
- Anaesthesia for Burns/Plastics
- Management (can be undertaken simultaneously with other modules)
- Intensive care - can be undertaken by trainee not wishing to embark a dual CCT with ICM – please discuss this with your TPD.



## Advanced Thoracic Anaesthesia

### Core Clinical Learning Outcomes

1. Provide perioperative anaesthetic care to a wide-range of thoracic cases demonstrating a fundamental understanding of the problems encountered
2. Show the decision making and organizational skills required of an anaesthetist to manage busy thoracic operating sessions ensuring that the care delivered to patients is safe and timely, benefiting both the patient and the organisation
3. Assist colleagues in decisions about the suitability of surgery in difficult situations
4. 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 working with you)
- CUT form on e-Portfolio.

e-Portfolio WPBA	Requirements (Please complete details and upload on e-Portfolio)	Minimum Number
CbD	Case description of trainee/trainer choice	1
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively.	1
MSF	Completed during this advanced module	1
Audit Completion	Relevant to thoracic anaesthesia	1
Teaching	Relevant to thoracic anaesthesia	1
Literature Review and Presentation	Relevant to thoracic anaesthesia	1



## Advanced Cardiac Anaesthesia

### Core Clinical Learning Outcomes

1. To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex cardiac surgical cases and cardiological procedures independently
2. Provide perioperative anaesthetic care to a wide-range of cases demonstrating a fundamental understanding of the problems encountered
3. Show the decision making and organizational skills required of an anaesthetist to manage busy cardiac operating sessions ensuring that the care delivered to patients is safe and timely, benefiting both the patient and the organisation
4. Assist colleagues in decisions about the suitability of surgery in difficult situations
5. Demonstrates advanced skills in image acquisition and interpretation for perioperative trans-oesophageal echocardiography and basic transthoracic echocardiography skills, to a level matching that of assessment by examination

### Unit Requirements

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

e-Portfolio WPBA	Requirements (Please complete details and upload on e-Portfolio)	Minimum Number
CbD	Case description of trainee/trainer choice	2
DOPS	Trans-oesophageal echocardiography	1
	Transthoracic echocardiography	
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively.	1
MSF	Completed during this advanced module	1
Audit Completion	Relevant to cardiac anaesthesia	1
Teaching	Relevant to cardiac anaesthesia	1
Literature Review and Presentation	Relevant to cardiac anaesthesia	1

Cardiac anaesthesia training at QEHB will also include release to Birmingham Heartlands Hospital for thoracic anaesthesia training.

For those trainees intending to pursue a career in cardiac anaesthesia training it is likely that a further period of training post CCT will be required in addition to the advanced training year.

## Advanced Neuroanaesthesia

### Core Clinical Learning Outcomes

1. Provide perioperative anaesthetic care to a wide variety of neurosurgical & neuroradiological cases independently demonstrating a fundamental understanding of the problems encountered
2. 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
3. Provide clinical input and leadership where required in neuro postoperative care units (including HDUs)
4. To assist colleagues in decisions about the suitability of surgery in difficult situations.
5. 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 working with you)
- CUT form on e-Portfolio.

Number of supervised neurocritical care sessions	20 clinical sessions
Number of unsupervised sessions (=remote, indirect supervision)	20 clinical sessions

Other Activities:	Neurosurgical clinic x1
	Cancer MDT x1
	Neurovascular MDT x1
	Neurosurgical M&M meetings x1



## Advanced Neuroanaesthesia continued

e-Portfolio WPBA	Requirements (Please complete details and upload on e-Portfolio)	Minimum Number
CbD	Neuroradiology case e.g. MR imaging or embolisation of an arteriovenous malformation	3
	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	
A-Cex	Neuroradiology: Coiling of intracranial aneurysm	3
	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
MSF	Completed during this advanced module	1
Audit Completion	Relevant to neuroanaesthesia	1
Teaching	Relevant to neuroanaesthesia	1
Literature Review and Presentation	Relevant to neuroanaesthesia	1



## Advanced 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:

1. 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
2. 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
3. To assist colleagues in decisions about the suitability of surgery in difficult situations
4. 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 working with you)
- CUT form on e-Portfolio.

e-Portfolio WPBA	Requirements (Please complete details and upload on e-Portfolio)	Minimum Number
CbD	Case description of trainee/trainer choice	1
A-Cex	Management of high risk obstetric patient	1
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively and managing the workload on delivery suite.	1
MSF	Completed during this advanced module	1
Audit Completion	Relevant to Obstetric Anaesthesia	1
Teaching	Anaesthetic trainees	1
	Other such as midwives, parents	1
Other Activities	Attendance at high risk antenatal assessment clinic	1
	Attendance at ultrasound/doppler assessment clinic	1
	Labour ward forum meeting	1



## Advanced 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 Paediatrics

The advanced module at BCH is aimed at the trainee wishing to work as a lead anaesthetist in paediatric anaesthesia in a DGH setting or as a specialist paediatric anaesthetist in a tertiary setting. It is suggested that those wishing to pursue a career as a specialist paediatric anaesthetist 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.

Certain subspecialist areas of paediatric anaesthesia e.g. cardiac will need additional training time and they are not specifically covered here.

For those wishing to work as a lead paediatric anaesthetist in a DGH setting it is suggested that a period of six months in an advanced module would normally be adequate. The following details the knowledge and skills that could be acquired during an advanced module at BCH.

<b>Knowledge</b>	<b>6 months</b>	<b>12 months</b>
Is able to discuss in depth, compare and evaluate the strategies for managing neonates and children with congenital diseases that have relevance to their perioperative anaesthetic care.	yes	yes
Has a detailed knowledge of provision of anaesthesia for paediatric day-case surgery, including general surgery, urology, orthopaedics, dental and ENT.	yes	yes
Discusses in depth the factors involved in development and running a paediatric acute pain service.	yes	yes
Has a detailed knowledge of paediatric resuscitation and stabilisation including principles of neonatal and paediatric transfer.	yes	yes
Has an understanding of consent in relation to procedures, restraint and research in children and young people.	yes	yes
Has an in-depth understanding of child protection issues.	yes	yes
Has a detailed understanding of congenital heart disease and the relevance to providing anaesthesia care for cardiac and non-cardiac surgery.	optional	yes
Has a detailed understanding of paediatric neurosurgery and craniofacial surgery anaesthesia techniques.	optional	yes
Has an understanding of anaesthesia for paediatric hepatobiliary surgery including transplantation.	optional	yes
Has an understanding of provision of anaesthesia for paediatric burns patients including acute major burns and reconstructive work.	optional	yes
Has an understanding of provision of anaesthesia for complex major general surgery and urology, including thoracotomy / thoracoscopy.	optional	yes
Has an understanding of anaesthesia for paediatric scoliosis surgery.	optional	yes
<b>Skills</b>	<b>6 months</b>	<b>12 months</b>
Demonstrates ability to manage the paediatric difficult airway, including fiberoptic techniques.	yes	yes
Performs advanced vascular access, including central venous & arterial cannulation including familiarity and use of 2D ultrasound to assist with insertion techniques.	yes	yes
Is able to provide regional anaesthesia for paediatric day case surgery eg – caudal block, ilioinguinal block, penile block, rectus sheath block.	yes	yes
Is able to provide neuraxial analgesia for small children and infants.	optional	yes
Demonstrates ability to provide sedation including the selection, management and monitoring of children for diagnostic and therapeutic procedures, with particular attention to working in areas outside the theatre suite but within the hospital environment	yes	yes
Demonstrates effective leadership in resuscitation and stabilisation of the critically ill child requiring transfer	yes	yes
Is able to communicate effectively with young children and adolescents	yes	yes
Is able to provide anaesthesia to the very sick and or premature neonate	optional	yes



DOPS	Case that demonstrates the 'Skills' domains mentioned above	1
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively.	1
MSF	Completed during this advanced module	1
Audit Completion	Relevant to paediatric anaesthesia or intensive care	1
Teaching	Relevant to paediatric anaesthesia or intensive care	1
Literature Review and Presentation	Relevant to paediatric anaesthesia or intensive care	1
<b>e-Portfolio WPBA</b>	<b>Requirements (Please complete details and upload on e-Portfolio)</b>	<b>Minimum Number</b>
CbD	Case that demonstrates the 'Knowledge' domains mentioned above	1
A-Cex	Case that demonstrates the 'Knowledge' domains mentioned above Case that demonstrates the 'Skills' domains mentioned above	1



## 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 Anaesthesia for 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:

1. Manage perioperative anaesthetic care for highly complex plastics and burns cases independently [including major reconstructive surgery] demonstrating a fundamental understanding of the problems encountered
2. 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
3. To assist colleagues in decisions about the suitability of surgery in difficult situations
4. 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 working with you)
- CUT form on e-Portfolio.

e-Portfolio WPBA	Requirements (Please complete details and upload on e-Portfolio)	Minimum Number
CbD	Free flap surgery	1
A-Cex	Anaesthesia for primary excision and grafting of burn	1
	ITU ward round and discussion with relatives	
DOPS	Regional anaesthesia for plastics/burns case	1
ALMAT	Be an effective member of the MDT, managing elective and emergency cases effectively.	1
MSF	Completed during this advanced module	1
Audit Completion	Relevant to burns or plastics	1
Teaching	Relevant to burns or plastics	1
Literature Review and Presentation	Relevant to burns or plastics	1



## Management

Where trainees are undertaking this module in association with a formal university based qualification in management at the advanced diploma or masters level then the requirements of this module can be varied to reconcile them with the work and assessment tasks required for that qualification.

This **MUST** be agreed by the RCoA and the GMC in advance.

Trainees are able to undertake this module during ST5 if the opportunity arises.

### Core Clinical Learning Outcomes

1. Understands the management process and structures at Trust level. Knows the functions of the various management and administrative departments and how they communicate and cooperate.
2. Understands the national processes by which health policy is developed, promoted, disseminated, introduced and monitored
3. Able to plan a project involving change and characterise the steps in its development
4. Has a deep understanding of the role of the different professionals in the organisation of the health service and knows the importance of encouraging inter-professional understanding and working.

### Unit Requirements

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

e-Portfolio WPBA	Requirements (Please complete details and upload on e-Portfolio)	Minimum Number
Reflective Portfolio	Maintains reflective portfolio of secondment including detailed report of a 'project'	1
	Presents a synopsis of their experiences as an advanced management trainee in a local educational forum and obtains formal feedback	1
MSF	Completed during this advanced module, relevant to the management role being undertaken	1
Audit Completion	Relevant to management	1
Teaching	Relevant to management	1
Other Activities	Management course/ local multi-specialty/inter-professional event attendance	1



## List Management Assessment Tool

The ALMAT form on the e-Portfolio does not include the full assessment domains for assessment of list management. This form should be printed and given to the assessor at the start of the list so they can record feedback; this should then be included under comments on the e-Portfolio ALMAT form.

Trainee Name

Date of Assessment

Surgical specialty

	Satisfactory	Unsatisfactory	Comments
Pre-operative assessment			
Management of bed issues, sending, communication with theatre staff			
Preparation for case: equipment, drug checks			
Pre-operative checks: WHO guidelines followed			
Conduct of anaesthesia; situational awareness, vigilance			
Management of patient turnaround			
Communication and management in recovery			
Overall efficiency and time management			
General comments			