This document has been compiled by Drs Jon Chambers and Richard Jee and adapted by Drs Julie Onslow and Kathy Torlot.
This document is intended as a guide to the work placed based assessments (WPBAs) that are necessary for completion of each unit of training and has been updated following the publication by the Royal College of Anaesthetists of the Assessment Guidance (2010 Curriculum). The RCOA document has been summarised. For each unit of training there are a minimum number of WPBAs that are required.

**Each Unit of Training is prefaced by a number of Core Clinical Learning Outcomes. A minimum requirement for the ARCP is evidence that these have been satisfactorily achieved.**

There are a number of different types of WPBAs that each trainee should obtain. The mix will be different for each unit. These are:

- A Anaesthesia Clinical Evaluation Exercise [A-CEX]
- C Case Based Discussion [CBD]
- D Direct Observation of Procedural Skills [DOPS]
- L Anaesthesia List Management Assessment Tool [ALMAT]
- M Multi-source Feedback [MSF]
- S Simulation

WPBAs must only be undertaken by those who are appropriately trained; if they are performed by others than consultants in anaesthesia, intensive care and pain medicine, a consultant must take ultimate responsibility for the assessment outcome and they should be countersigned by the educational supervisor.

Once the trainee has completed all the minimum clinical learning outcomes identified in ‘The Basis of anaesthetic practice’ (0-6 months) and has obtained the IAC, they will move on to the remainder of Basic Level Training known as “Basic Anaesthesia”. This will provide a comprehensive introduction to all aspects of elective and emergency anaesthetic practice.

The Basic anaesthetic units of training are:

- Airway management
- Critical incidents
- Day surgery
- General, urological and gynaecological surgery
- ENT, maxillo-facial and dental surgery
- Non-theatre/Transfer
- Obstetrics
- Orthopaedic surgery
- Paediatrics
  - Child protection
- Pain medicine
- Regional
- Sedation
- Trauma and stabilisation

Intensive Care medicine will be delivered as a three month module. Please see Annex F CCT in Anaesthesia for Basic Level Training requirements.
Airway Management

Minimum clinical learning outcomes: Must be achieved
- Able to predict difficulty with an airway at preoperative assessment and obtain appropriate help
- Able to maintain an airway and provide definitive airway management as part of emergency resuscitation
- Demonstrates the safe management of the can’t intubate can’t ventilate scenario
- Maintains anaesthesia in a spontaneously breathing patient via a facemask for a short surgical procedure [less than 30 mins]

SUGGESTED WPBAs:

CBD
Explains the methods commonly used for assessing the airway to predict difficulty with tracheal intubation (AM_BK_01)

DOPS
Able to maintain an airway and provide definitive airway management as part of emergency resuscitation

A-CEX
Maintains anaesthesia in a spontaneously breathing patient via a facemask for a short surgical procedure [less than 30 mins]

SIM
Demonstrates management of ‘can’t intubate, can’t ventilate’ (AM_BS_10)

Additional WPBA
a) ____________________________________________________________

b) ____________________________________________________________

MINIMUM REQUIREMENT IN THIS UNIT IS COMPLETION OF 1 A-Cex, 1 DOPs and 1 CBD

Completion of unit of training form signed off?
Critical Incidents

Minimum clinical Learning Outcomes: Must be achieved

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

**SIM**

Basic Competences for Critical Incidents – Demonstrates the emergency management of the following critical incidents in simulation:

1. Cardiac and/or respiratory arrest
2. Unexpected Hypoxia with or without cyanosis
3. Unexpected increase in peak airway pressure
4. Progressive fall in minute volume during spontaneous respiration or IPPV
5. Fall in end tidal CO2
6. Rise in end tidal CO2
7. Rise in inspired CO2
8. Unexpected hypotension
9. Unexpected hypertension
10. Sinus Tachycardia
11. Arrhythmias [ST segment changes; sudden tachy dysrhythmia; sudden bradycardia; Ventricular ectopics – Ventricular tachycardia – Ventricular Fibrillation]
12. Convulsions

Demonstrate the management of the following specific conditions in simulation:

1. Aspiration of vomit
2. Laryngospasm
3. Bronchospasm
4. Tension Pneumothorax
5. Gas/Fat/Pulmonary embolus
6. Adverse drug reactions
7. Anaphylaxis
8. Transfusion of miss-matched blood or blood products
9. Malignant hyperpyrexia
10. Inadvertent intra-arterial injection of irritant fluids
11. High spinal block
12. Local Anaesthetic toxicity
13. Failed intubation
14. Difficulty with IPPV and sudden or progressive loss of minute volume

It is not expected that trainees will formally demonstrate simulated management of more than a small number of these specific events but they must know the steps in managing all.

**MINIMUM REQUIREMENT = HAS BEEN TO THE NOVICE SIMULATOR COURSE**

Completion of unit of training form signed off?
Day Surgery

Learning outcomes:
- To gain knowledge, skills and experience of the perioperative anaesthetic care of ASA 1 and 2 patients presenting in a dedicated Day Surgery Unit involving a range surgical specialties (minimum three)
- Understand and apply agreed protocols with regard to patient selection and perioperative care of day surgery patients
- Understand the importance of minimising postoperative complications, such as nausea and pain, in patients who are returning home the same day

Minimum clinical learning outcome: Must be achieved
- Knows the criteria for patient selection and the anaesthetic requirements for day surgical patients

SUGGESTED WPBAs:

A-CEX
Demonstrates appropriate anaesthetic management of ASA 1 and 2 patients requiring day surgery (DS_BS_02)

CBD
Knows the criteria for patient selection and the anaesthetic requirements for day surgical patients

Additional WPBA
a) 

b) 

MINIMUM REQUIREMENT IN THIS UNIT IS COMPLETION OF 1 A-CEX, 1 DOPs and 1CBD

Completion of unit of training form signed off?
General, Urological and Gynaecological Surgery

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

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

SUGGESTED WPBAs:

DOPS
Demonstrate use of the nerve stimulator to evaluate neuromuscular block (AGB_D01)

A-CEX
Demonstrates the ability to deliver safe perioperative anaesthetic care to ASA1-3 patients for straightforward surgical procedures e.g. body surface surgery, appendicectomy, ERPC (GU_BS_04)

Administer anaesthesia to a patient with ischaemic heart disease (AGB_A06)

ALMAT
Demonstrates the ability to manage an elective surgical list with uncomplicated ASA 1-3 adults for straightforward body surface and lower abdominal surgery under distant supervision (GU_BS_05)

CBD
Discuss the effects and hazards of the pneumoperitoneum induced for laparoscopic surgery (AGB_C05)

Discuss the management of anaesthesia in the presence of common inter-current diseases e.g Asthma, COPD, Hypertension, IHD, Rheu A, Steroid therapy, Diabetes (AGB_C10)

Additional WPBA
a) 

MINIMUM REQUIREMENT IN THIS UNIT IS COMPLETION OF 1 A-CEX, 1 DOPs and 1 CBD

Completion of unit of training form signed off?
ENT, Maxillo-Facial and Dental Surgery

Learning outcomes:

- Gain knowledge and skills of the perioperative anaesthetic care of patients undergoing minor to intermediate ear, nose and throat (ENT), maxilla-facial and dental surgery
- To be able to recognise the specific problems encountered with a ‘shared airway’ and know the principles of how to manage these correctly

Minimum clinical learning outcome: Must be achieved

- Deliver perioperative anaesthetic care to ASA 1-3 adults, and ASA 1 and 2 children over 5, for non-complex ear, adenotonsillar and nasal surgery under direct supervision

SUGGESTED WPBAs:

A-CEX
The provision of safe perioperative anaesthetic care for a wide range of commonly performed procedures, with good operating conditions and an appropriate level of analgesia, including: (EN_BS_02)
- ENT procedures such as tonsillectomy, septoplasty and myringotomy
- Common dental procedures such as extractions and apicectomies

Administer anaesthesia for a shared airway procedure (AGB_A02)

CBD
Discuss how did the trainee dealt with anticipated problems where surgeon and anaesthetist shared the airway. (AGB_C02)

Additional WPBA

a) 

b) 

MINIMUM REQUIREMENT IN THIS UNIT IS COMPLETION OF 1 A-CEX, 1DOPs AND 1 CBD

Completion of unit of training form signed off?
Non-Theatre/Transfer

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

Minimum clinical learning outcome: Must be achieved
- Can maintain anaesthesia for stable critically ill adult patients requiring diagnostic imaging under distant supervision [in conjunction with their transfer as identified in Transfer Medicine]
- Safely manages the intra-hospital transfer of the critically ill but stable adult patient for the purposes of investigations or further treatment [breathing spontaneously or with artificial ventilation] with distant supervision

SUGGESTED WPBAs;

A-CEX
Can maintain anaesthesia for stable critically ill adult patients requiring diagnostic imaging under distant supervision (in conjunction with their transfer as identified in Transfer Medicine) (This may be done within ICM module)

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

Additional WPBA
a)

b)

MINIMUM REQUIREMENT IN THIS UNIT IS COMPLETION OF 2 A-CEX, 2 DOPs and 2 CBDs

Completion of unit of training form signed off?
Learning outcome:
- To gain knowledge, skills and experience of the treatment of the healthy pregnant woman

Minimum clinical learning outcomes: Must be achieved
- To pass the formal practical initial assessment of competence in obstetric anaesthesia and, having achieved this, be able to provide analgesia and anaesthesia as required for the majority of the women in the delivery suite
- To understand the management of common obstetric emergencies and be capable of performing immediate resuscitation and care of acute obstetric emergencies [e.g. eclampsia; pre-eclampsia; haemorrhage], under distant supervision but recognising when additional help is required

All of the following twelve needs to be completed before the Obstetric Initial Assessment of Competence certificate can be signed off.

**A-CEX**
(Basic Competencies for Obstetric Anaesthesia)

Conduct epidural analgesia for labour (OB_BTC_A01)
Conduct regional anaesthesia for caesarean section (OB_BTC_A02)
Conduct general anaesthesia for caesarean section (OB_BTC_A03)

**DOPS**
(Basic Competencies for Obstetric Anaesthesia)

Top up epidural for labour analgesia (OB_BTC_D01)
Top up epidural for caesarean section (OB_BTC_D02)
Perform spinal anaesthesia (OB_BTC_D03)

**CBD**
Discuss how changes in the anatomy and physiology due to pregnancy influenced the conduct of anaesthesia (OB_BTC_C01)
Discuss whether pregnancy influenced the choice of drugs used during anaesthesia (OB_BTC_C02)
Discuss how the conduct of general anaesthesia is affected by late pregnancy  
(OB_BTC_C03)

Examine the case records of a patient that the trainee has anaesthetised for operative  
delivery in a situation where major haemorrhage might be expected. Discuss the  
factors that influence the likelihood of major obstetric haemorrhage, the precautions  
that should be taken to deal with it and the principles of its management.  
(OB_BTC_C04)

Examine the case records of a patient with pregnancy associated hypertension that the  
trainee has treated. Discuss how this influences anaesthetic management.  
(OB_BTC_C05)

Examine the case records of a patient for whom the trainee provided extradural  
algesia for normal labour. Discuss the methods of pain relief available for normal  
delivery. (OB_BTC_C06)

Additional WPBA

a)  

b)  

Initial Assessment of Competence in Obstetric anaesthesia  
certificate signed ?
Orthopaedic Surgery

Learning outcomes:
- To gain knowledge, skills and experience of the perioperative anaesthetic care of patients requiring orthopaedic surgery including patients with long-bone fractures
- To understand the relevance of diseases of bones and joints to anaesthesia
- To be able to recognise and manage the perioperative complications of orthopaedic surgery relevant to anaesthesia

Minimum clinical learning outcome: Must be achieved
- Deliver perioperative anaesthetic care to uncomplicated ASA 1-3 adult patients for straightforward elective and emergency orthopaedic/trauma surgery to both upper and lower limbs, including Open Reduction Internal Fixation [ORIF] surgery [which includes fractured neck of femur], under distant supervision

SUGGESTED WPBAs;

A-CEX or DOPS
Demonstrates the provision of perioperative anaesthetic care for patients requiring orthopaedic surgery to the upper and lower limbs including but not exclusively:
(OR_BS_01)
- ORIF surgery including internal fixation of fractured neck of femur
- Lower limb primary arthroplasty including patients in the lateral position

Demonstrates correct assessment and perioperative management of the elderly patient with a hip fracture (OR_BS_03)

Administer anaesthesia to an elderly patient [> 80 years] (AGB_A07)

Conduct regional anaesthesia for surgery (AGB_A08)

ALMAT
Conduct an appropriate orthopaedic operating list (AGB_L02)

Additional WPBA

a)

b)

MINIMUM REQUIREMENT IN THIS UNIT IS COMPLETION OF 1 A-CEX, 1 DOPs AND 1 CBD OR ALMAT

Completion of unit of training form signed off?
Paediatrics

Learning outcomes:
- Obtain knowledge of the principles underlying the practice of anaesthesia for children aged 1 year and older and the specific needs therein
- Have completed training in child protection

Minimum clinical learning outcomes:
- Demonstrates correct management of the paediatric airway in the following ways [if case mix allows, down to one year of age, but at least down to five years of age]:
  - Is able to size airway devices correctly [i.e. oral airways and tracheal tubes]
  - Is able to insert airway devices correctly
  - Is able to ventilate an apnoeic child using a bag and mask +/- an oral airway
  - Is able to intubate a child correctly, using the most appropriate size tracheal tube, placed at the correct length
- Maintains anaesthesia in a spontaneously breathing patient via a facemask for a short surgical procedure [less than 15 mins]

SUGGESTED WPBAs:

A-CEX (12-24 months)
Make preoperative assessment of a fit child (PAB_A01)
Administer anaesthesia to a child age>5 spontaneous ventilation (PAB_A02)
Administer anaesthesia to a child age>5 controlled ventilation (PAB_A03)

DOPS (12-24 months)
Conduct IV Induction in a fit child (PAB_D01)
Conduct inhalation induction of fit child (PAB_D02)
Demonstrates ability to manage the airway correctly including selection of the correct masks, airways, laryngeal mask airways and tracheal tubes (PA_BS_06)

SIM
Demonstrates ability to perform paediatric resuscitation as described by the Resuscitation Council [UK] [S] (PA_BS_10)

CBD
Examine the case notes of a child the trainee has anaesthetised and discuss how differences in anatomy from the adult influenced the conduct of the anaesthetic. (PAB_C01)
Discuss how the choice of drugs and drug doses differs from the adult. (PAB_C02)
Discuss airway management and the choice of suitable anaesthetic circuits for a child. (PAB_C03)

All should complete Level 1 Child Protection Teaching

**Additional WPBA**

a) 

b) 

**MINIMUM REQUIREMENT IN THIS UNIT IS COMPLETION OF 1 A-CEX, 1DOPs ,1 CBD AND LEVEL 1 CHILD PROTECTION**

Completion of unit of training form signed off?
Pain Medicine

**Learning outcomes:**
- To be competent in the assessment and effective management of acute post-operative and acute non post-operative pain
- To acquire knowledge necessary to provide a basic understanding of the management of chronic pain in adults

**Minimum clinical learning outcomes:** *Must be achieved*
- Competence in the assessment and effective management of acute post operative and acute non post operative pain
- To have an understanding of chronic pain in adults

**SUGGESTED WPBAs:**

**A-CEX**
Demonstrates the ability to assess, manage and monitor acute post operative and non post operative pain (PM_BS_01)

**DOPS**
Manages epidural analgesia by continuous infusion [6-12 months] AGB_D04

**CBD**
Discuss how the trainee chose a regime for post operative pain relief and how they judged its adequacy (AGB_C15)

Describes a basic understanding of chronic pain in adults (PM_BK_06)

**Additional WPBA**

a) 

b) 

**MINIMUM REQUIREMENT IN THIS UNIT IS COMPLETION OF 1 A-CEX, 1 DOPs AND 1 CBD**

Completion of unit of training form signed off?
Regional

**Learning outcomes:**
- To become competent in all generic aspects of block performance
- Able to obtain consent for regional anaesthesia from patients
- Create a safe and supportive environment in theatre for awake and sedated patients
- Demonstrate knowledge of the principles of how to perform a number of regional and local anaesthetic procedures
- Be able specifically to perform spinal and lumbar epidural blockade
- Be able to perform some simple upper and lower limb peripheral nerve blocks under direct supervision
- Be able to use a peripheral nerve stimulator or ultrasound to identify peripheral nerves
- Demonstrate clear understanding of the criteria for safe discharge of patients from recovery following surgery under regional blockade
- Recognise that they should not attempt blocks until they have received supervised training, and passed the relevant assessments
- Accepts the right of patients to decline regional anaesthesia – even when there are clinical advantages

**Minimum Clinical Learning outcome: Must be achieved**
- Demonstrates safely at all times during performance of blocks including: marking side of surgery and site of regional technique; meticulous attention to sterility; selecting, checking, drawing up, diluting, and the adding of adjuvants, labelling and administration of local anaesthetic agents
- Establish safe and effective spinal and lumbar epidural blockade and manage immediate complications in ASA 1-2 patients under distant supervision
- Ability to establish a simple nerve block safely and effectively

**SUGGESTED WPBAs;**

**DOPS**
Demonstrates how to undertake a comprehensive and structured pre-operative assessment of patients requiring a subarchnoid blockade, perform the block and manage side effects/complications correctly (RA_BS_04)

Demonstrates how to undertake a comprehensive and structured pre-operative assessment of patients requiring a lumbar epidural blockade, perform the block and manage side effects/complications correctly (RA_BS_05)

Demonstrates how to perform some simple nerve blocks from amongst the following: Femoral; Ankle; Inguinal nerve blockade(RA_BS_11)

**A-CEX**
Conduct anaesthesia for surgery using spinal or epidural anaesthesia (RAB_A01)

Manage the sedative regime of a patient undergoing surgery using regional anaesthesia (RAB_A02)
CBD
Outlines the dangers of accidental intravenous administration of local anaesthetic
drugs, signs, symptoms and management, including the role of intra-lipid (RA_BK_12)

Discuss the choice of local anaesthetics & spinal opioids in the context of regional
anaesthesia (RAB_C01)

Discuss the innervation and spinal dermatomes of any regional anaesthetic block the
trainee has used (RAB_C02)

Discuss the management of the complications of spinal and epidural (including caudal)
analgesia [associated hypotension, shivering, nausea & anxiety] (RAB_C03)

Discuss the absolute and relative contraindications to regional blockade (RAB_C04)

Additional WPBA

a)

b)

MINIMUM REQUIREMENT IN THIS UNIT IS COMPLETION OF 1 A-CEX, 1 DOPs
AND 1 CBD

Completion of unit of training form signed off?
Sedation

Learning outcomes:
- To gain a fundamental understanding of what is meant by conscious sedation and the risks associated with deeper levels of sedation
- To be able to describe the differences between conscious sedation and deeper levels of sedation, with its attendant risks to patient safety
- Understands the particular dangers associated with the use of multiple sedative drugs especially in the elderly
- To be able to manage the side effects in a timely manner, ensuring patient safety is of paramount consideration at all times
- To be able to safely deliver pharmacological sedation to appropriate patients and recognise their own limitations

Minimum clinical learning outcome: Must be achieved
- Provision of safe and effective sedation to ASA 1 and 2 adult patients, aged less than 80 years of age using a maximum of two short acting agents

SUGGESTED WPBAs;

**A-CEX**
Demonstrates the ability to administer and monitor intravenous sedation to patients for clinical procedures (CS_BS_04)

Manage the sedative regime of a patient undergoing surgery using regional anaesthesia (RAB_A02)

**CBD**
Discuss the trainee’s choice and use of sedatives and tranquillisers (AGB_C04)

Additional WPBA
a) .................................................................................................................................

b) .................................................................................................................................

**MINIMUM REQUIREMENT IN THIS UNIT IS 1 A-CEX, 1 DOPs AND 1 CBD**
Completion of unit of training form signed off?
Learning outcomes:
- To understand the basic principles of how to manage patients presenting with trauma
- To recognise immediate life threatening conditions and prioritise their management

Minimum clinical learning outcome: Must be achieved
- Understands the principles of prioritizing the care of patients with multi-trauma including airway management

SUGGESTED WPBAs:

SIM or DOPS

Demonstrates correct emergency airway management in the trauma patient including those with actual or potential cervical spine damage [S] (MT_BS_02)
Assess a patient’s Glasgow Coma Scale rating and advise appropriate safe levels of monitoring and care [3-6 months] (AGB_D02)
Perform a primary and secondary survey of an injured patient [may be done in simulator] (AGB_D03)

CBD
Discuss the management of cervical spine injuries (AGB_C24)

Additional WPBA
a) 

b) 

MINIMUM REQUIREMENT IN THIS UNIT IS 1 A-CEX, 1 DOPs AND 1 CBD OR SIM SESSION

Completion of unit of training form signed off?