Royal College of Anaesthetists

Initial Assessment of Competence (IAC)

Entrustable Professional Activities 1 and 2

WORKBOOK

Contents

Authors: Dr Joe Lipton, Dr Bernd Oliver Rose

Graphics: Dr Bagrat Lalabekyan, Mr Julian Beeton

All enquiries in regard to this document should be addressed to the Royal College of Anaesthetists, Churchill House, 35 Red Lion Square, London WC1R 4SG
020 7092 1550 training@rcoa.ac.uk | rcoa.ac.uk/training-careers

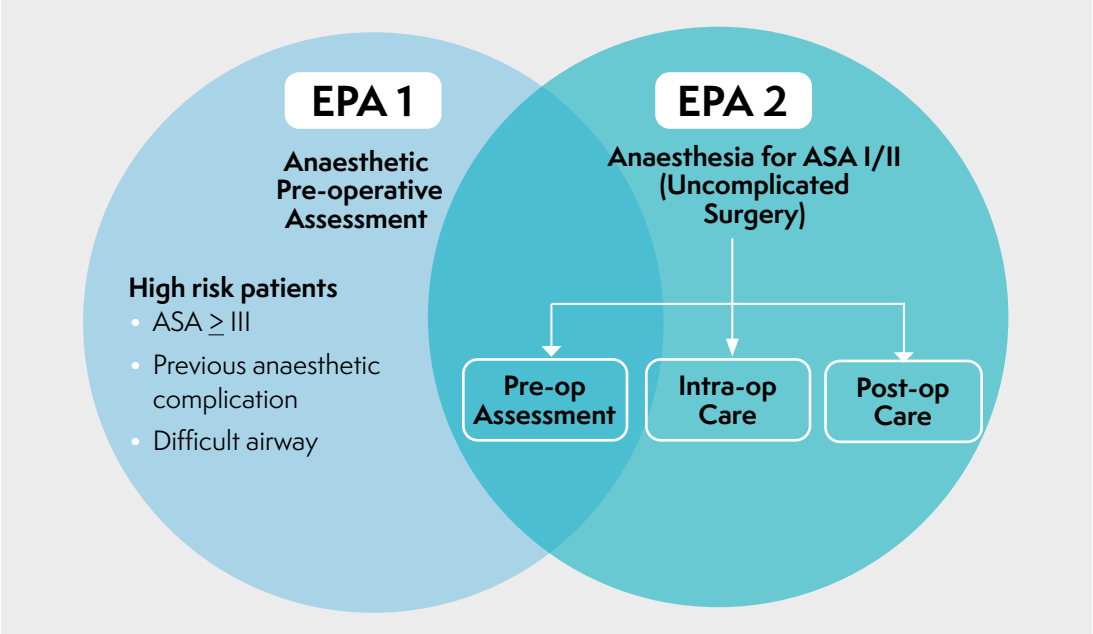
Registered Charity No: 1013887 Registered Charity in Scotland No: SCO37737 VAT Registration No: GB 927 2364 18

Introduction

The Initial Assessment of Competence (IAC) is the first milestone in Anaesthetics training. We use the term 'novice anaesthetist', to describe a learner who is yet to achieve their IAC. During the novice period, which can last up to 6 months, trainees must acquire the fundamental knowledge, skills and attitudes needed to provide safe anaesthetic care to patients. The IAC is the foundation of training in Anaesthetics and is also a mandatory component of Core Training in Emergency and Intensive Care Medicine.

The IAC consists of the two Entrustable Professional Activities (EPA) shown in Figure 1. Each EPA is described in greater detail below.

Figure 1: EPA 1 and EPA 2 Description and Overlap



The practice of novice anaesthetists is always supervised by consultants or by registrars outside of normal working hours. Award of the IAC is framed around the entrustment scale shown in Table 1.

To attain the IAC, anaesthetists in training must be able to perform each EPA at supervision level 2B.

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

Table 1: EPA supervision scale

Learning and assessing progress for the IAC

The Lifelong Learning platform (LLp) enables trainees to record a range of evidence to document learning progression towards achieving the IAC. These are outlined in table 2 with specific recommendations for each EPA contained in the relevant sections below.

Summative assessment determining progression will be based on the collective judgement and observations of the trainer faculty and supported by evidence uploaded to the LLp.

Type of evidence	Examples and purpose
Supervised Learning Events (SLEs)	■ SLEs using A-CEX, CBD and DOPS tools should be completed regularly as a formative way of gaining the knowledge and understanding of the components of the syllabus. ■ Whenever you are with a trainer there are opportunities for learning. Use SLEs to record the reflective conversation that you have had with your trainer. ■ This workbook outlines what you need to learn during your novice period. ■ Constructive feedback from your trainer should help you understand developments required to progress to the next levels of supervision/ entrustment. ■ SLEs can also provide evidence of capability to detect and report high risk patients to supervisors.
Logbook of cases	■ This demonstrates the range of anaesthetic techniques undertaken and the caseload experienced during the period of training.
Reflections	■ You should be able to reflect on clinical experience and other educational activities. ■ SLEs can be used to reflect on learning in the clinical setting. ■ You can also add reflections on courses attended, simulation training, teaching sessions, personal reading, etc.
Personal activities	Record of learning activities including: ■ attendance at relevant educational courses eg novice courses ■ simulation ■ departmental teaching ■ textbook and journal reading.
Multiple Trainer Report (MTR)	■ This is an assessment of your progress for your stage of training. ■ You need to complete one MTR during the novice period in order to achieve the IAC. ■ The report covers generic professional capabilities and knowledge and understanding of anaesthetic practice. This will be used to support entrustment decisions by the trainer faculty and covers capabilities for EPAs 1 and 2.

Table 2: Learning and Assessment for the IAC

EPA 1: performing an anaesthetic preoperative assessment

The intention of this EPA is that you are able to gather relevant information to support the planning and delivery of perioperative care. To be awarded the IAC, anaesthetists in training must recognise features of the history, examination and investigations that confer increased anaesthetic risk and communicate these risks to senior colleagues.

At the end of this training period you will be able to:

- take a focused history, perform appropriate physical examination and interpret relevant investigations
- understand how a patient's past medical, surgical and anaesthetic history influences the safe conduct of anaesthesia
- identify patients with an increased 'perioperative risk' and raise concerns appropriately
- communicate the anaesthetic plan to patients in an understandable way, including counselling on commonly occurring risks and addressing patient concerns
- understand limitations and scope of practice of a novice anaesthetist.

Limitations

- Advanced knowledge of perioperative risk stratification and optimisation is not expected at this stage of training.
- Novice anaesthetists are not expected to possess in-depth knowledge of the anaesthetic techniques used for major surgical procedures, nor should they be expected to take consent for procedures in which they are not trained.

Areas of knowledge to be covered

- Common medical and surgical co-morbidities and their impact on the conduct of anaesthesia.
- Features of the history and examination which confer increased anaesthetic risk and communicate these to senior colleagues, including:
  - Severe comorbidity (ASA ≥ III)
  - Previous anaesthetic complications
  - Anticipated or known difficult airway.

Sources of information used to assess progression

Figure 2 provides a guide to the expected learning progression for EPA 1. Summative entrustment decisions will be based on the sources of information contained in Table 3.

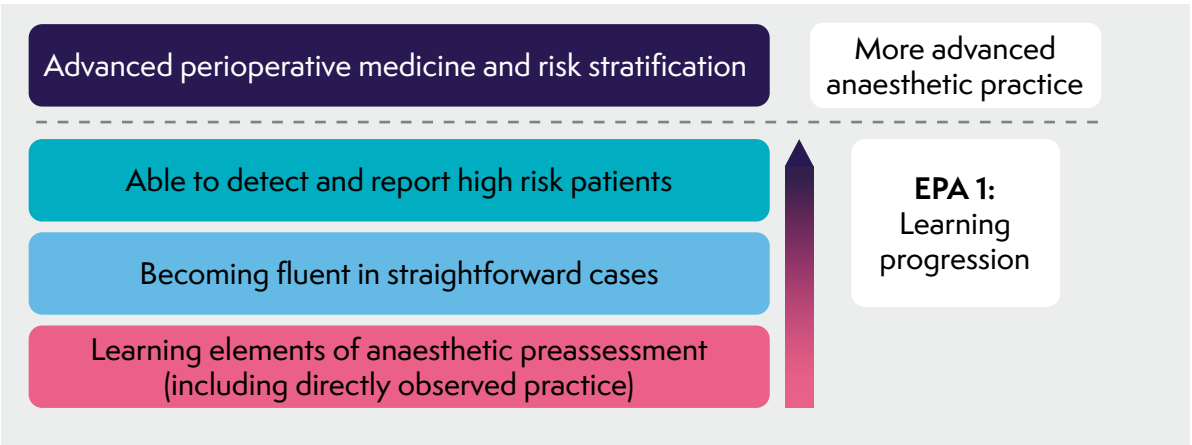


Figure 2: Learning Progression for EPA 1

Type of Evidence	Examples
Supervised Learning Events	■ Regular completion of A-CEXs and CBDs to capture the learning process and demonstrate the core knowledge and skills outlined above. ■ Evidence of capability to detect and report high risk patients to supervisors.
Personal activities	■ Attendance at novice courses covering aspects relevant to preoperative assessment.
Reflections	■ On difficult or challenging cases showing what was learned about how this influenced future practice.
Multiple Trainer Report	■ Assessment of progress for stage of training. ■ This will report on generic professional capabilities and knowledge and understanding relevant to anaesthetic preoperative assessment. ***NB: only one MTR, covering capabilities for both EPA 1 and 2, is required for the award of the IAC.***

Table 3: Evidence used for Entrustment in EPA 1

EPA 2: general anaesthesia for an ASA I/II patient having uncomplicated surgery

The intention of this EPA is that you are able to provide general anaesthesia for ASA I/II patients having uncomplicated surgery. This is to prepare you to care for low risk patients having unplanned, urgent or emergency surgery, while carrying out your on call duties. You must be capable of performing at Supervision Level 2B, with a supervisor (Consultant or StR) within the hospital for queries and able to provide prompt direction/assistance.

At the end of this training period you will be able to:

- understand your scope of practice as an inexperienced practitioner and seek help appropriately
- plan and deliver general anaesthesia to appropriate patients including the following techniques:
  - airway management with supraglottic devices and endotracheal intubation
  - spontaneous and controlled ventilation
  - rapid sequence induction.
- prepare and check emergency drugs and equipment commonly used in anaesthetic practice
- independently check and use a standard anaesthetic machine
- manage tracheal extubation, including common complications occurring during emergence from anaesthesia; eg, laryngeal spasm
- manage acute postoperative pain including the use of rescue opiates in recovery and patient controlled analgesia
- demonstrate understanding and capability in Anaesthetic Non-technical Skills
- initiate management of common anaesthetic emergencies, including unanticipated difficult airway management, and call for senior help.

Limitations

- Does not include the unsupervised management of previously fit patients with significant physiological derangement such as septic shock or acute blood loss.
- You are not expected to be the sole anaesthetist responsible for elective operating lists.

Areas of knowledge to be covered

- Knowledge underpinning EPA 1 (Anaesthetic Pre-operative Assessment) to enable safe perioperative care planning.
- Starvation policies for administration of general anaesthesia.
- Working knowledge of commonly used anaesthetic equipment, including the anaesthetic machine, standard monitoring and airway equipment.
- Working knowledge (including preparation/dosage/effects/side-effects/cautions) of the commonly used classes of anaesthetic drugs:
  - induction agents
  - muscle relaxants/reversal agents
  - volatile anaesthetic agents
  - analgesics
  - antiemetics
  - sympathomimetics/anticholinergics.
- Difficult Airway Society Algorithm.

- Physiological effects of general anaesthesia.
- Physiological consequences of common surgical techniques including laparoscopic surgery.
- Risks posed to patients when positioning them for surgery, in particular related to pressure areas, peripheral nerves and other delicate structures.
- Infection prevention and control in the operating theatre.

Sources of information used to assess progression

Summative entrustment decisions will be based on the sources of information contained in Table 4. Some skills are assessed through simulation (see appendix for IAC Simulation Training Requirements).

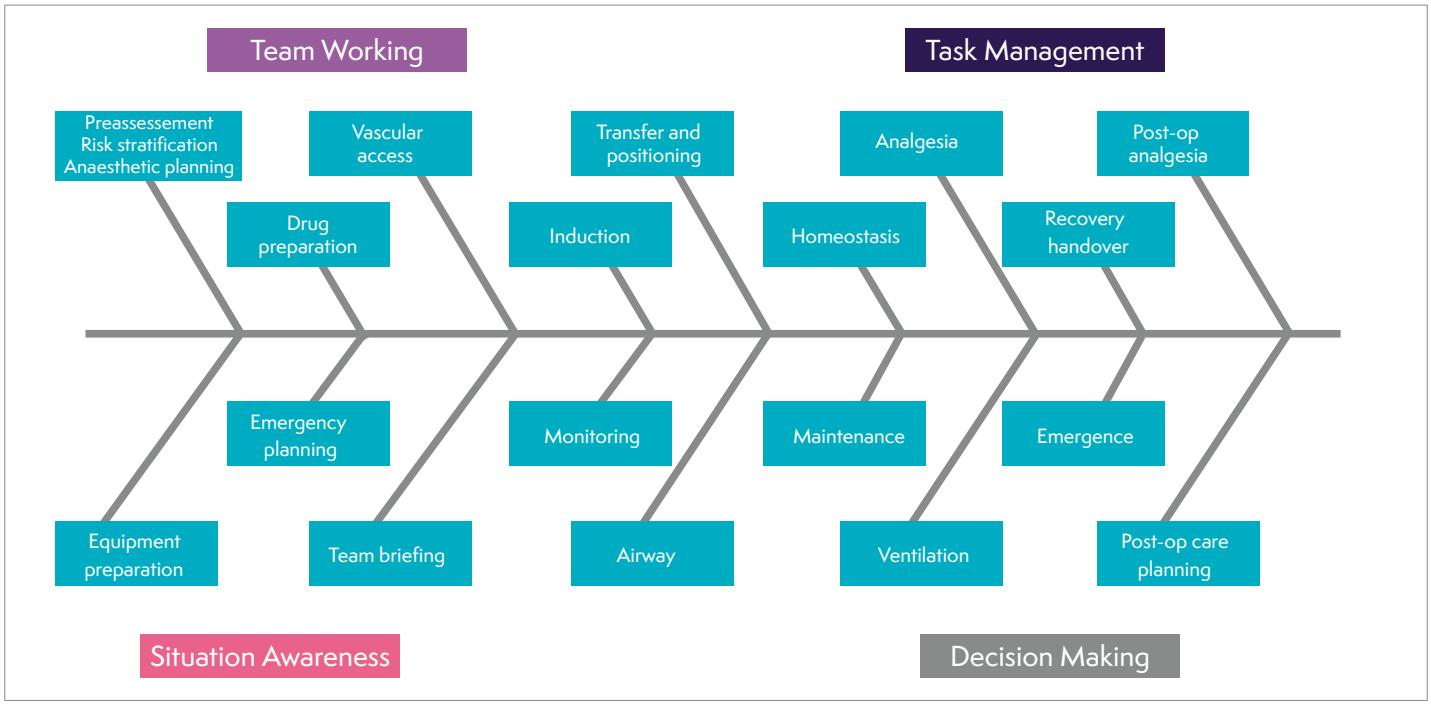
Type of Evidence	Examples
Supervised Learning Events	■ Regular completion of A-CEXs, DOPS and CBDs to capture the learning process and demonstrate the core knowledge, skills, attitudes and behaviours outlined above (see figure 3 for guidance). ■ These should always include: › Anaesthetic Machine Check (DOPS) › Core Anaesthetic Drugs (A-CEX/CBD) • induction agents • muscle relaxants/reversal agents • volatile anaesthetic agents • analgesics • antiemetics • sympathomimetics/anticholinergics.
Personal activities and simulation	■ Simulation training requirements for EPA 2 (see appendix) › novice anaesthesia skills and drills › assessment of failed intubation drill. ■ Attendance at relevant courses and in-house teaching covering topics relevant to EPA 2.
Logbook of cases	■ Appropriate number of cases, range of exposure to common surgical techniques and evidence of independent practice.
Reflections	■ On difficult or challenging cases showing what was learned about how this influenced future practice.
Multiple Trainer Report	■ Assessment of progress for stage of training. ■ This will report on generic professional capabilities and knowledge and understanding relevant to EPA 2. ***NB: only one MTR, covering capabilities for both EPA 1 and 2, is required for the award of the IAC.***

Table 4: Evidence used for Entrustment in EPA 2

Planning SLEs for EPA 2

The fishbone diagram in figure 3 shows the skills required for the completion of EPA 2. SLEs should focus initially on individual elements in turn. As you become more proficient and begin to practice with more independence, SLEs may be used to provide global feedback on performance and guide the transition to entrustment. The following diagram is a guide for learning. You are not required to provide evidence on the LLp for every individual element.

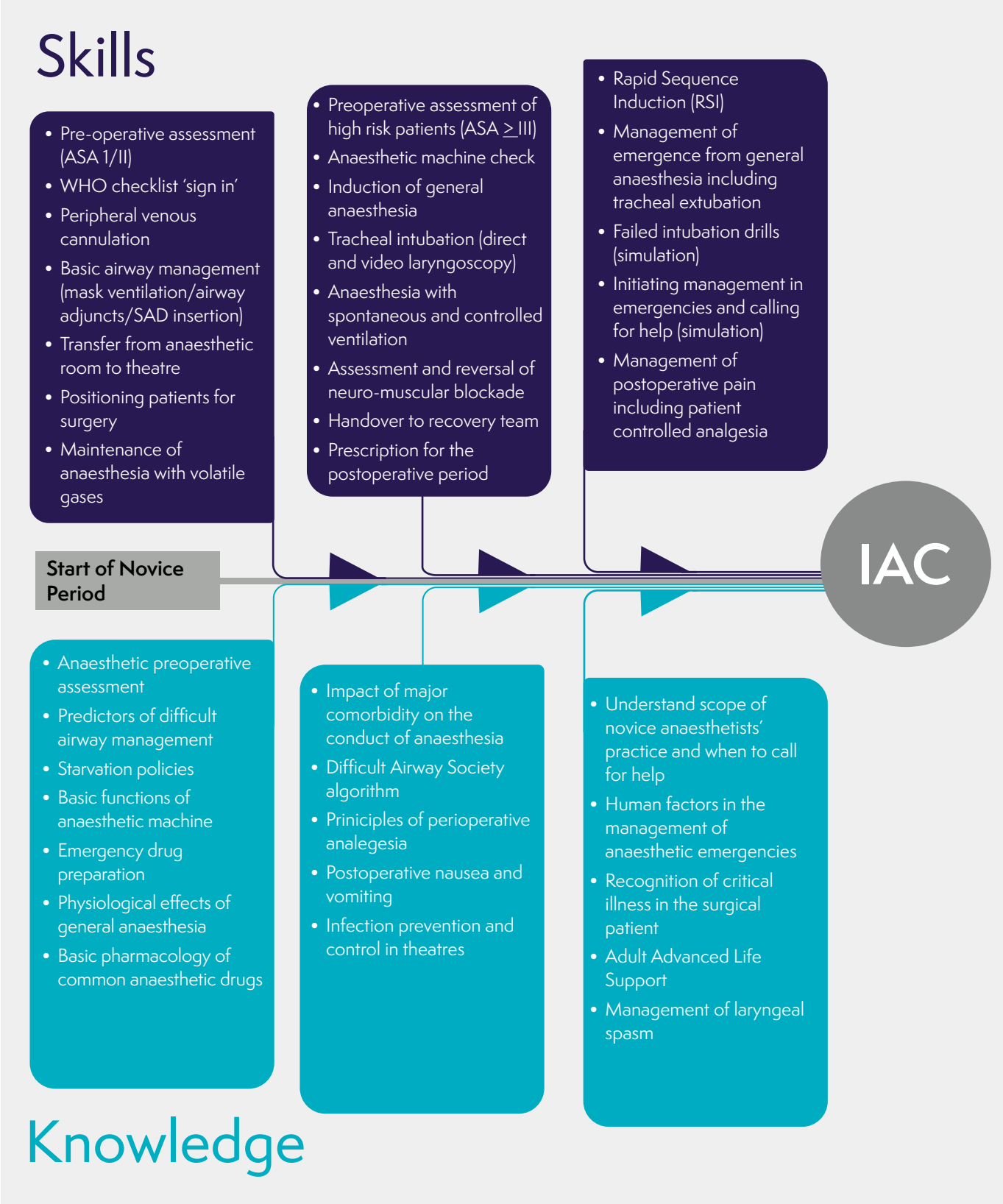
Figure 3: Fishbone diagram for EPA 2



Knowledge and skills for the IAC

Figure 4 demonstrates the knowledge and skills required to be awarded the IAC. This summary diagram can be used to guide learning and to support entrustment decision making. You are not required to provide evidence on the LLp for every individual element.

Figure 4: Knowledge and skills for the IAC



Completing the IAC: final sign-off procedure

Sign-off for the IAC should be a reflection of the collective judgement of the novice anaesthesia training faculty. Anaesthetists in training must be capable of performing EPAs 1 and 2 at a supervision level of 2b in order to be awarded the IAC. The decision to award the IAC should be supported by the information recorded in LLp, including SLEs, personal activities (including simulation) and personal reflections, as well as observations made by trainers in the workplace. The views of a range of appropriate trainers (minimum 3) should be collated using the multiple trainer report tool, which is initiated by a member of the training faculty prior to sign off.

Anaesthetists in training who require additional time to complete their IAC should be supported in gaining the additional training and experience they require to reach the expected level of performance. Feedback and guided reflection with trainers should be used to devise an appropriate plan for development.

Appendix 1: simulation syllabus for IAC

Name of training	Novice anaesthesia skills and drills
Learning outcomes	Discuss and rehearse the AAGBI quick reference handbook (QRH) **unknowns** Rehearse the routine for dealing with failed intubation on a manikin
Timing	CT1 0-3 months ACCS CT2 0-3 months
Delivery methods minimum requirements	Low fidelity Group / individual exposure to skills and drills Each individual must rehearse the routine for dealing with failed intubation on a manikin Could be multi-professional
Equipment minimum requirements	Intubatable manikin Airway equipment – including difficult airway equipment used in your department
Faculty minimum requirements	A faculty member able to sign off work place based assessments
Location of training	In-situ or simulation suite

Name of training	Assessment of failed intubation drill for IAC
Learning outcomes	Demonstrate the routine for dealing with failed intubation on a manikin as per DAS guidelines
Timing	CT1, ACCS CT2 prior to IAC sign off
Delivery methods minimum requirements	Low fidelity Each individual must demonstrate competency for dealing with failed intubation on a manikin
Equipment minimum requirements	Intubatable manikin Airway equipment – including difficult airway equipment used in your department
Faculty minimum requirements	A faculty member approved to sign off IAC
Location of training	In-situ or simulation suite

Appendix 2: EPA completion forms

Royal College of Anaesthetists

Entrustable Professional Activity Completion Form

EPA 1: performing an anaesthetic preoperative assessment

This is to certify that (name):

GMC number:

College reference number (CRN):

Has presented evidence that demonstrates that they have reached the required level of supervision for this entrustable professional activity and is entrusted to perform an anaesthetic preoperative assessment at supervision level 2B.

Final signoff must be done by one consultant anaesthetist

Assessor name:

Assessor signature:

GMC number:

Date:

Hospital or department date stamp

Royal College of Anaesthetists

Entrustable Professional Activity Completion Form

EPA 2: general anaesthesia for an ASA I/II patient having uncomplicated surgery

This is to certify that (name):

GMC number:

College reference number (CRN):

Has presented evidence that demonstrates that they have reached the required level of supervision for this entrustable professional activity and is entrusted to perform general anaesthesia for an ASA I/II patient having uncomplicated surgery at supervision level 2B.

Final signoff must be done by one consultant anaesthetist

Assessor name:

Assessor signature:

GMC number:

Date:

Hospital or department date stamp

Royal College of Anaesthetists
Churchill House, 35 Red Lion Square, London WC1R 4SG
020 7092 1500 | training@rcoa.ac.uk | rcoa.ac.uk/training-careers
@RCoANews
RoyalCollegeofAnaesthetists
Information correct as at June 2021