Royal College of Anaesthetists

Assessment Strategy for 2021 Anaesthetics Curriculum

Version 1.1

Change log

This document outlines the Assessment Strategy to be used by doctors completing postgraduate training in anaesthetics in the UK. It accompanies the *2021 Curriculum for a CCT in Anaesthetics*.

This is Version 1.0, published in August 2021. As the document is updated, version numbers will be changed, and content changes noted in the table below.

Version number	Date issued	Summary of changes
Version 1.1	17 February 2023	• 'structured' learning event updated to 'supervised' learning event throughout, for consistency with other College resources

Executive summary

This assessment strategy comprises the rationale for, and content of the RCoA programme of assessment to be used from 4th August 2021 until a later version is published which will then take precedence.

It draws on the strengths of previous strategies with some development of existing, effective assessment practices to support the 2021 curriculum.

This strategy must be read in conjunction with the RCoA Curriculum.

This document outlines the purpose of the assessments and the mechanisms by which their on-going validity are ensured.

The assessments used for the 2021 curriculum do not differ from those in previous assessment strategies, but the way they are used is changed subtly to reflect the changes to the structure and emphasis of the curriculum. Supervised Learning Events (SLEs) will use feedback on the learner's performance and supervision/entrustment scales to promote learning and demonstrate progress. They will encourage reflection by the learner on the learning event.

The use of consultant feedback has been formalised and multiple trainer reports (MTRs) will be used to guide improvement and assess progress.

The evidence from assessments will be brought together in the Holistic Assessment of Learning Outcome (HALO) form, which will be used to demonstrate achievement of learning outcomes at each stage of training.

The focus of training on the achievement of Higher Learning Outcomes (HLOs) and the assessments will show attainment of key capabilities across all domains of learning.

Key critical progression points have been identified in line with the *GMCs Designing and maintaining postgraduate assessment programmes.* These points mark transition to a higher level of training.

The Fellowship of the RCoA Primary and Final examinations will be essential components of the assessment of progress at these points together with a range of assessments in the workplace.

The RCoA Lifelong Learning platform (LLp) will support the structure of the new curriculum and will ensure that the assessments relate to the key capabilities and learning outcomes.

The Educational Supervisor's Structured Report (ESSR) within the LLp will set out the evidence for the learning outcomes in a clear framework so assisting the assignment of outcomes by the ARCP panel.

The development of assessment for appropriate activities with the use of Entrustable Professional Activities (EPAs) is outlined in this strategy.

Contents

1 Purpose of programme of assessment

The purpose of the programme of assessment is to "*Robustly evidence, ensure and clearly communicate the expected levels of performance at critical progression points in, and to demonstrate satisfactory completion of training as required by the approved curriculum*." GMC, *Designing and maintaining postgraduate assessment programmes*.

The programme of assessment sets out to ensure that all areas of the training curriculum are sampled and assessed in a number of different ways thereby providing reassurance that doctors completing post-graduate training in anaesthesia are fit to practice.

The purpose of the anaesthetic curriculum is to enable doctors to become consultant anaesthetists with the generic professional and specialty specific capabilities to lead, develop and deliver high quality anaesthesia, and perioperative, critical care, and pain medicine. The programme of assessment supports this and is to:

- assess an anaesthetists in training's actual performance in the workplace
- encourage the development of the anaesthetist in training as an adult responsible for their own learning
- enhance learning by providing formative assessment, enabling the anaesthetists in training to receive immediate feedback, understand their own performance, and identify areas for development
- drive learning and enhance the training process by making it clear what is required of anaesthetists and motivating them to ensure they receive suitable training and experience
- demonstrate anaesthetists in training have acquired the GPCs and meet the requirements of Good Medical Practice
- ensure that anaesthetists in training possess the essential underlying attitudes, knowledge and skill required for their practice
- provide robust, summative evidence that anaesthetists in training are meeting the curriculum standards during the training programme
- inform the ARCP process, identifying any requirements for targeted or additional training where necessary and facilitating decisions regarding progression through the training programme
- identify anaesthetists in training who should be advised to consider a change of career direction.

The programme of assessments comprises several different types of assessment including examinations, and summative and formative assessments conducted in the workplace. The use of an integrated approach with a range of methodologies ensures that the programme of assessment demonstrates that anaesthetists in training have achieved the relevant learning outcomes at the appropriate stages of training.

A blueprint illustrates the assessment type that should or could be used to assess specific learning outcomes. The type of assessment used should be appropriate to the activity being assessed. All assessments, including those conducted in the workplace, are linked to the relevant learning outcomes.

Decisions made at critical progression points will use evidence from a range of assessments together with the professional judgement of those trainers who have observed the doctor in practice.

The programme of assessments defines these critical progression points and supports the learning outcomes at the distinct stages of training.

In Stage 1 the assessments focus on acquiring the knowledge and skills to be a safe anaesthetist working with defined levels of supervision in emergency and elective 'generalist' anaesthetic practice. During Stage 2 anaesthetists in training will increase their knowledge and skills in wider

areas of practice and will be developing greater autonomy. By the end of Stage 3 anaesthetists in training will have gained the knowledge and skills required for independent practice with generalist skills and expertise in areas of specialist interest. They will be able to use their knowledge and skills to develop practice in others.

2 How the programme of assessment is to be used with the curriculum

The anaesthetic curriculum uses an outcome-based curriculum with 14 domains and 3 stages of training. The key capabilities relating to the learning outcomes, which are required at each stage of training, are listed together with examples of evidence that may be used to demonstrate their attainment.

The programme of assessment grid sets out the assessment requirements at each stage of training and those that must be completed at key progression points.

The grid outlines where formative and summative assessments are to be used. The broad range of assessments generate the necessary evidence required for global judgements to be made about satisfactory performance, progression in and completion of training.

Figure 1 – the programme of assessment (** critical progression point)

<table>
<tr><td></td><td colspan="3">Stage 1</td><td colspan="2">Stage 2</td><td colspan="2">Stage 3</td></tr>
<tr><td></td><td>CT1</td><td>CT2</td><td>CT3 **</td><td>ST4</td><td>ST5 **</td><td>ST6</td><td>ST7 **</td></tr>
<tr><td colspan="8">Formative Supervised Learning Events (SLEs)</td></tr>
<tr><td>A-CEX</td><td colspan="7" rowspan="5">There is no requirement for a minimum number of SLEs each year. The anaesthetist in training should use SLEs in a formative way to demonstrate reflection on learning and progress. Feedback on the learning event should help the learner improve their practice. The SLEs allow the trainer to indicate what level of supervision is required for the trainee for that case or procedure. Feedback should include guidance on how the learner develops their practice to reach the desired supervision level.

Practical procedures should be assessed with a DOPS tool.</td></tr>
<tr><td>ALMAT</td></tr>
<tr><td>CBD</td></tr>
<tr><td>DOPS</td></tr>
<tr><td>A-QIPAT</td></tr>
<tr><td colspan="8">Summative Assessments</td></tr>
<tr><td>Initial Assessment of Competence (IAC) **</td><td colspan="3">■ Completed in CT1
■ Supervision level 2b
■ EPAs 1 and 2</td><td colspan="4" rowspan="2"></td></tr>
<tr><td>Initial Assessment of Competence in Obstetric Anaesthesia (IACOA)</td><td colspan="3">■ Completed by end of CT2
■ Supervision level 3
■ EPAs 3 and 4</td></tr>
<tr><td>MSF (one per year)</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td>Multiple Trainer Report</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td>HALO</td><td colspan="3">Stage 1 domains of learning 1-14</td><td colspan="2">Stage 2 domains of learning 1-14</td><td colspan="2">Stage 3 domains of learning 1-14</td></tr>
<tr><td colspan="8">FRCA Examinations</td></tr>
<tr><td>Primary FRCA</td><td colspan="3">Essential</td><td colspan="4"></td></tr>
<tr><td>Final FRCA</td><td colspan="3"></td><td colspan="2">Essential</td><td colspan="2"></td></tr>
<tr><td colspan="8">Educational Supervisors Structured Report (ESSR)</td></tr>
<tr><td>ESSR</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr>
</table>

2.1 Critical Progression Points

There are four critical progression points during anaesthetic training:

2.1.1 Critical progression point 1: Initial Assessment of Competence (IAC)

This is the first component of training and in practice normally takes between three and six (indicative) months for most doctors to achieve. It is a summative assessment and anaesthetists in

training must complete it in its entirety before trainers consider whether it is acceptable for them to progress to undertake aspects of clinical anaesthetic practice without direct supervision. It is important that anaesthetists and their trainers recognise that possession of the IAC does not imply that an anaesthetist in training may deliver direct anaesthetic care to patients without continuing appropriate supervision, but is the first milestone in the training programme.

2.1.2 Critical progression point 2: End of Stage 1 (CT3)

To complete Stage 1 training successfully, the anaesthetist in training must pass the Primary FRCA in its entirety, as well as attaining all of the generic and specialty learning outcomes required for that stage of training. In signing the *Stage One Training Certificate,* trainers must be satisfied that the anaesthetist in training has obtained the required level of achievement in all of the learning outcomes for stage 1. If this is not the case, then the anaesthetist in training requires additional training time, as detailed in the Gold Guide. Satisfactory completion of Stage 1 is a prerequisite for eligibility for recruitment, and entry, to stage 2 of the anaesthetic training programme.

Additionally, The *Initial Assessment of Competence in Obstetric Anaesthesia (IACOA)* must be obtained by all anaesthetists in training during stage 1, before being considered safe to work in an obstetric unit without direct supervision. It is recommended that this is attained after a block of obstetric anaesthetic training, usually commenced after one year in programme. Achieving the IACOA does not signal meeting the obstetric anaesthetic capabilities of Stage 1 training.

2.1.3 Critical progression point 3: End of Stage 2 (ST5)

To complete Stage 2 training successfully, the anaesthetist in training must pass the Final FRCA in its entirety, as well as attaining all of the generic and specialty learning outcomes required for that stage of training. In signing the *Stage Two Training Certificate,* trainers must be satisfied that the anaesthetist in training has obtained the required level of achievement in all of the learning outcomes for stage 2. If this is not the case, then the anaesthetist in training. requires additional training time, as detailed in the Gold Guide. A satisfactory ARCP outcome will be required for entry to Stage 3 training (ST6-7).

2.1.4 Critical progression point 4: End of training (ST7)

The final progression point is at the end of training when anaesthetists in training will be required to demonstrate that they have met the specified standard in all of the HLOs for the end of this final stage of training. Trainers must be satisfied that this is the case and a satisfactory outcome will be required before signing a *Stage 3 Training Certificate* in order that an anaesthetist in training can apply for the award of a CCT.

2.1.5 Overarching assessment blueprint

The overarching assessment blueprint shows how each of the assessments relates to the domains of learning. It is not necessary that every method will be used for each key capability and additional evidence may be used to make a global judgement on attainment.

Figure 2 – the assessment blueprint

	Generic professional domains							**Specialty specific domains**						
	Professional Behaviours & Communication	Management & Professional Regulatory Requirements	Team Working	Safety & Quality Improvement	Safeguarding	Education & Training	Research & Managing Data	Perioperative Medicine & Health Promotion	General Anaesthesia	Regional Anaesthesia	Resuscitation and transfer	Procedural Sedation	Pain	Intensive Care Medicine
A-CEX	**O**	**O**	**O**		**O**	**A***		**A***	**A***	**A***	**A***	**A***	**A***	**A***
DOPS	**O**		**O**	**O**		**A***		**O**	**A***	**A***	**O**	**O**	**A***	**A***
CBD	**O**	**A***	**O**	**O**	**A***	**A***	**O**	**A***	**A***	**A***	**A***	**A***	**A***	**A***
ALMAT	**A***	**A***	**A***		**O**			**A***	**A***	**A***	**O**	**A***	**A***	
A-QIPAT	**O**	**O**	**O**	**A***			**O**							
MSF	**A***	**O**	**O**	**O**	**O**	**O**	**O**	**A***	**A***	**A***	**O**	**A***	**O**	**A***
MTR	**A***	**O**	**A***	**O**	**O**	**A***	**A***	**A***	**A***	**A***	**A***	**A***	**A***	**A***
HALO	**A***	**A***	**A***	**A***	**A***	**A***	**A***	**A***	**A***	**A***	**A***	**A***	**A***	**A***
IAC/IACOA	**O**		**O**	**O**	**O**			**A***	**A***	**A***	**A***	**A***	**A***	
Primary FRCA	**A***	**O**	**O**	**A***	**O**		**A***	**A***	**A***	**A***	**A***	**A***	**A***	**A***
Final FRCA	**A***	**O**		**A***	**O**		**A***	**A***	**A***	**A***	**A***	**A***	**A***	**A***

A* should be used to assess this domain

O may be used to assess this domain

3 RCoA Assessments

The assessments used by the RCoA fall into two categories:

1. Fellowship of Royal College of Anaesthetists (FRCA) examinations
2. Assessments in the workplace

The assessments in the workplace can be further divided into:

a. Formative assessments: Supervised Learning Events (SLEs), Multi Source Feedback (MSF), Multiple Trainer Reports (MTRs)
b. Summative assessments: Initial Assessment of Competence (IAC), Initial Assessment of Competence for Obstetric Anaesthesia (IACOA), Holistic Assessment of Learning Outcomes (HALO), Multiple Trainer Reports (MTRs).

At all stages of training the Educational Supervisor's Structured Report (ESSR) will make a recommendation to the ARCP panel as to whether the trainee has met the required level of achievement in each of the domains for each stage of training and where relevant, the critical progression points. The ARCP panel will make the final decision on whether the anaesthetist can be signed off to progress to the next year and/or level of training.

4 FRCA Examinations

The Fellowship of the Royal College of Anaesthetists (FRCA) examinations are an integral part of the RCoA's programme of assessments. The FRCA examinations provide trainee anaesthetists with the opportunity to demonstrate at critical progression points the required outcomes of their training programme. The FRCA examinations comprise a programme of summative assessments in two parts, Primary and Final. Each part uses validated assessment methods to test a broad-spectrum of knowledge, understanding, skills, behaviours and attitudes, as defined by the anaesthetic training curriculum.

The Primary FRCA examination consists of three components: a Multiple Choice Question examination (MCQ), an Objective Structured Clinical Examination (OSCE) and a Structure Oral Examination (SOE). All Primary examination components are blueprinted to Stage 1 of the anaesthetic curriculum. Questions used in each component are tagged to the Primary examinations syllabus. The High Level Outcomes (HLOs) and the capabilities relevant to each domain of learning are set out in the assessment blueprint. Successful completion of all three Primary examination components is required to complete Stage 1and proceed to Stage 2 of the anaesthetic training programme.

The Final FRCA examination consists of two components: a Written examination in 2 parts (part 1 is a MCQ examination and part 2, a Constructed Response Question (CRQ) examination), and a SOE. The examinations used in the Final FRCA are blueprinted to Stage 1 and Stage 2 of the anaesthetic training curriculum. The questions used in the Final FRCA examinations are tagged to the FRCA Primary and Final examinations syllabuses. The High Level Outcomes (HLOs) and the capabilities relevant to each domain of learning are set out in the assessment blueprint. Successful completion of the Final FRCA examination allows progression to Stage 3 of anaesthetic training.

4.1 The Primary FRCA examinations:

4.1.1 The Primary FRCA Multiple Choice Question (MCQ) examination

The Primary FRCA MCQ contains 90 MCQs: 60 Multiple True False (MTF) questions and 30 Single Best Answer (SBA) questions. The 60 MTF questions assess the following subject areas:

- 20 questions in pharmacology
- 20 questions in physiology, including related biochemistry and anatomy
- 20 questions in physics, clinical measurement, statistical methods and data interpretation.

The 30 SBA questions are taken from any of the categories listed above.

The Primary FRCA MCQ examination is a summative assessment blueprinted to Stage 1 of the curriculum. It forms a gateway examination to the Primary FRCA SOE and OSCE examinations, which assess the application of knowledge tested in the MCQ. A successful MCQ candidate will demonstrate an appropriate breadth and level of knowledge of the core sciences, and their relevance to practical anaesthesia and anaesthesia-related medicine. This forms the basic knowledge that underpins all further training in anaesthetics.

4.1.2 The Primary Objective Structured Clinical Examination (OSCE) examination

The Primary FRCA OSCE comprises 16 live stations, all of which count towards the result. To allow additional candidates to be examined, one or more rest stations may be added. The Primary OSCE stations currently assess resuscitation, technical skills, anatomy (general procedure), history taking, physical examination, communication skills, anaesthetic equipment, monitoring equipment,

measuring equipment, anaesthetic hazards, and the interpretation of images. One or more of the stations may involve the use of a medium fidelity simulator.

The Primary OSCE is a summative assessment of a candidate's clinical and communication skills, and applied technical knowledge of anaesthetic equipment, clinical monitoring and measurement. The Primary FRCA OSCE is taken together with the SOE and is blueprinted to Stage 1 of the anaesthetic curriculum. A successful candidate will have demonstrated the clinical skills and applied technical knowledge across multiple clinical scenarios required of a competent Stage 1 trainee.

The OSCE is the only component using a simulated clinical environment, including communication with simulated patients. The OSCE complements the Primary SOE, and candidates must pass both parts to be awarded the FRCA Primary.

4.1.3 The Primary Structured Oral Examinations (SOE)

The Primary SOE has two subsections:

- SOE 1: oral examination consisting of three questions in pharmacology, and three questions in physiology and biochemistry.
- SOE2: oral examination consisting of three questions on clinical topics (including a critical incident), and three questions in physics, clinical measurement, equipment and safety.

The Primary FRCA SOE is a summative assessment of a candidate's knowledge and understanding of the basic sciences; the foundations upon which further clinical knowledge is based. The SOE also assesses clinical decision-making and knowledge of equipment used in Stage 1 training. The SOE is taken together with the Primary FRCA OSCE, and is blueprinted to the Stage 1 training curriculum.

The SOE complements formative assessments undertaken in the workplace, and provides assurance that candidates have reached the accepted national standard of knowledge and competence to progress to Stage 2 training.

4.2 The Final FRCA examinations

4.2.1 The Final FRCA Written examination

The Final FRCA Written examination has two parts, the Final FRCA MCQ examination and the Final FRCA Constructed Response Question (CRQ) examination

The **Final FRCA Constructed Response Question (CRQ) examination** contains 12 questions which are blueprinted to the Stage 2 curriculum. Each question is tagged to the Primary and Final FRCA syllabus,

The CRQ paper assesses the mandatory areas of training. These areas may appear as stand-alone questions or as part of a question, for example pain management within a perioperative case. In addition to specific knowledge-based competences, examination material may be developed from guidance or recommendations published by healthcare organisations. The public expects doctors to keep up-to-date with important developments and such material may be examined under the collective umbrella of 'professionalism'.

The Final FRCA MCQ contains 90 MCQs: 60 MTF questions and 30 SBA questions. The 60 MTF questions assess the following areas:

- 20 questions on advanced sciences to underpin anaesthetic practice
- 40 questions covering generalist and specialist topics within Stage 2.

The 30 SBA questions divide as follows:

- 15 questions on generalist topics
- 15 questions from specialist topics within Stage 2

The Final FRCA Written examination is a summative assessment, blueprinted to Stage 1 and 2 training curriculums. The examination assesses the knowledge required of an anaesthetist in training at the end of Stage 2 training in anaesthetics. The CRQ examination complements the MCQ paper, and whilst both parts test factual knowledge and understanding, the CRQ assesses judgment and the ability to prioritise information. The Written examination forms a gateway to the Final FRCA SOE, which assesses application of this knowledge.

4.2.2 The Final FRCA Structure Oral Examination (SOE)

The Final SOE assesses clinical anaesthesia and comprises 2 parts, SOE 1 and SOE 2:

- SOE 1 contains parts A and B, which are taken consecutively. Each part comprises two clinical short cases, each with a linked clinical science question. The clinical science question may come before or after the clinical short case.
- SOE2 comprises a two section clinical long case followed by two stand-alone clinical short cases taken in one sitting which are . This SOE is 36 minutes long, with 10 minutes to view clinical material, 13 minutes for the two-section clinical long case, and 13 minutes to answer the two clinical short cases on clinical anaesthesia, unrelated to the clinical long case. The SOE tests generalist and specialist topics from within Stage 2.

The Final FRCA SOE is a summative assessment of a candidate's knowledge, understanding and decision-making abilities in clinical anaesthesia and the applied underpinning clinical science. It is the last component of the FRCA examination to be taken, and successful candidates are awarded the Fellowship by Examination of the Royal College of Anaesthetists. The SOE complements formative assessments undertaken in the workplace and provides assurance that candidates have reached the accepted national standard of knowledge and competence to progress to Stage 3 of anaesthetic training.

4.3 Linking curriculum content to the examinations – Blueprints and examination syllabus

The FRCA examinations form part of a variety of assessment tools designed to support anaesthetic anaesthetists in training acquire and demonstrate the knowledge, skills and attitudes required to meet the standards expected on completion of training. The examinations are mapped to the relevant higher learning outcomes and Stage of training within the curriculum through the assessment blueprint, which in itself is an essential tool for assessment planning[1]. The Primary and Final FRCA examination syllabus provides the anaesthetists in training and their trainers with detailed information on specific areas of anaesthetic training covered by each examination component. This ensures that the expected content of each examination and the standard of performance expected is clearly defined. In this way, progress can be monitored and appropriate feedback can be reported back to candidates and trainers.

[1] Crossley J., Humphris, G & Jolly, B. (2002). Assessing health professionals. Medical Education.

4.4 Validity of the Examinations

Validity is an important consideration in measuring the quality of an examination and demonstrating that each examination component plays a vital role within the integrated framework of the wider programme of assessment.

The Validity theory recommended in *Designing and maintaining postgraduate assessment programmes*[2] is Kane's Validity Framework[3] (KVF). KVF requires awarding bodies to state the purpose of the examination component within the examinations framework and asks for evidence to support the choice, content and format of the examinations. This strategy document sets out a purpose statement for each examination component in the FRCA examinations framework. It provides justification and evidence of how the examinations overall and at component level, ensure the safe management of anaesthetists in training through critical progression points within the anaesthetic training programme, and clearly communicates the levels of performance expected.

As defined in the GMC standards, examinations must consist of "*an integrated set of assessments* […] *which are blueprinted against, and supports, the approved curriculum. It may comprise of different methods*". To this aim, the components that make up the FRCA are not only blueprinted to the curriculum, but have also been selected to assess three of the four levels of Miller's pyramid[4]; knows, knows how [and why] and shows. The fourth level, 'Does', is assessed by workplace-based assessments and relates to behaviour in real life situations.

Figure 3 – examination components against Miller's' pyramid

Component	Miller's level	Testing aims
MCQ	Knows Knows how	Breadth of factual knowledge (MTF) Application of knowledge (SBA)
SOE / CRQ	Knows and Knows how	Depth of knowledge, understanding and application of knowledge
OSCE	Shows How	Skills (procedural and cognitive), underpinned by knowledge.

Whilst the written examinations and the SOE examinations are aimed at the same levels of Miller's pyramid (knows and knows how), the SOEs are designed to test a candidate's knowledge beyond recall and recognition of facts. The structured interactions allow examiners to explore a number of higher order domains within Bloom's revised taxonomy[5], see figure 2 below, such as understanding, application of knowledge, analysing and evaluating.

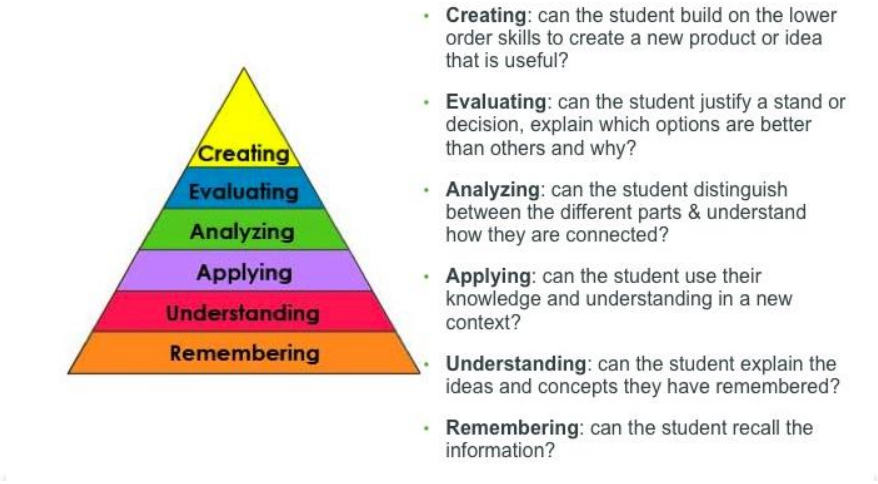
[2] GMC. (2017). Designing and maintaining postgraduate assessment programmes

[3] Kane, M.T. (2013). Validating the interpretations and uses of test scores. Journal of Educational Measurement, special issue: Validity, 50:1.

[4] Miller, G. (1990). The assessment of clinical skills/competence/performance. Academic Medicine, 65.

[5] Anderson, L. W. & Krathwohl, D.R., et al. (2001). A taxonomy for learning, teaching and assessing.

Figure 4 – Bloom's revised taxonomy (BRT)



4.5 Standard setting

The FRCA examinations are high-stake summative assessments that have the potential to impact on trainee careers and patient safety. The format of the examinations was approved by the GMC in September 2009, and they have continued to be used as a means of ensuring anaesthetic anaesthetists in training have the appropriate minimum level of knowledge and skills to progress to the next stage of their training programme. With this purpose, the processes that underpin pass/fail decisions must be robust, consistent and fair.

The principle of standard setting is to set the pass mark for an examination against a criterion-referenced standard by determining the minimum level of knowledge and/or skills required to pass an examination. There are several recognised standard setting processes used in high-stake medical examinations, and different examination formats lend themselves to different standard setting methods. The FRCA examinations use a mixture of test-centred and examinee-centred standard setting methods.

4.5.1 Primary and Final MCQ examinations

The cut score for the Primary and Final MCQ examinations is established by the Angoff referencing method. In following best practice, a dedicated Angoff referencing group of examiners use the Angoff process to determine a cut score and make an adjustment of 1 Standard Error of Measurement (SEM) to arrive at the pass mark. Training is given to all members of the Final and Primary MCQ Angoff reference groups in the process, and to develop a collective understanding of the 'minimally competent' candidate, as defined below:

"For the purposes of the (Primary or Final) MCQ examination, a 'minimally competent' candidate is one who has only just enough depth and breadth of knowledge stipulated within the (stages 1 and 2) curriculum to underpin their current clinical practice and equip them for the next phase of their anaesthetic training. If they pass the written examination but do not undertake further preparation and gain more understanding, they are likely to fail any subsequent SOE or OSCE on the same curriculum areas."

In determining the 'minimally competent' candidate, members of the Angoff referencing groups are encouraged to use personal experience of anaesthetists in training sitting the examination at the particular stage of training.

After each examination, the examiner groups carry out an in-depth item analysis on items with unexpected performance statistics. Item deemed problematic, are removed from the paper before scores are finalised.

4.5.2 Primary FRCA OSCE

The OSCEs use standardised clinical scenarios, which ensure every candidate receives an **equal and fair** evaluation of their knowledge and skills. The pass mark for the Primary OSCE is currently set using a modified Angoff reference method. The OSCE is about overall performance and candidates do not have to pass a predetermined number of stations. Each question is assigned an Angoff score, which has been determined before the examination by an Angoff group of OSCE examiner experts. Angoff scores for each question are aggregated to give the examination pass mark.

4.5.3 Primary and Final FRCA SOE

The pass mark for the Primary FRCA SOE is currently a set pass mark of 77%. This pass mark was agreed by the examinations committee following the analysis of historical data, and has consistently provided a pass rate of 50 – 55%. The Primary examiner board are awaiting the findings of the forthcoming FRCA examination review before replacing the current fixed pass mark.

The pass mark for the Final SOE is established using borderline regression (BLR). BLR is an effective standard setting method when used in high-stakes, structured oral examinations. The examiner is face-to-face with the candidate and can make an honest, informed decision on the level of achievement that should be awarded. Six examiners assess each candidate across the Final SOE, giving marks for performance on each question and awarding a global score for a candidate's overall performance. This standard setting method uses real examination data on which to determine a pass and can also identify problems with an SOE question.

All standard setting methods used across the FRCA programme of examinations are widely used by colleges and faculties to set a fair pass mark. The internal reliability of the examination, even though they suffer from small cohorts, consistently achieves a test-retest reliability figure within the good/acceptable range. All examiners undertake regular training and carry out standard setting benchmarking exercises to ensure. A number of examiners take part in the assessment of a candidate in the clinical examinations, which contributes positively towards the reliability of the FRCA examinations[6].

4.5.4 Fairness

The fairness of an examination refers to its freedom from any kind of bias. To this end and in the exercising of its duties under the Equality Act 2010, the RCoA give due regard to:

- eliminating discrimination, harassment, victimisation and any other unacceptable conduct
- advancing equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it
- fostering good relations between persons who share a relevant protected characteristic and persons who do not share it.

The RCoA aims to ensure that everyone has equal opportunity to demonstrate their ability in the examinations and that no candidate is treated less favourably than another on grounds of race, disability, sex, transgender, sexual orientation, age, religion, or pregnancy and maternity.

[6] Van der Vleuten, C.P.M. and Swanson, D.B. (1990). Assessment of clinical skills with standardized patients: state of the art. Teach Learn Med, 2(2):58-76.

To ensure FRCA examinations do not disadvantage any candidate, or group of candidates, on any basis other than the candidate's lack of the knowledge and skills, all FRCA question examiners take particular care in the wording of questions to avoid ambiguity or offence across cultures. Additionally, examiners seek advice from specific experts/organisations/ associations or the experience of individuals in the workplace on topics which may potentially affect certain ethnicities or cultures.

The RCoA works hard to ensure the boards of examiners are well balanced in their diversity, which goes some way to ensuring our examinations are as fair as they can be. The RCoA encourages feedback from candidates on the examination process and its content, and this provides access to a viewpoint on some protected characteristics not reflected in our examiner groups. Trainers, lay members and external experts visit the examinations and their feedback helps increase our understanding and appreciation of the examinations from stakeholders who share protected characteristics. However, the protected characteristics and cultures listed in the 2011 census is as it is intended to be, very diverse and it would be impossible to engage with everyone on every decision.

4.5.4.1 Reasonable adjustments

The RCoA considers reasonable adjustments for examination candidates with disability, as set out in the examination regulations. Special arrangements for pregnancy and temporary medical conditions are also provided where necessary. Full details are available at appendix 3 of the FRCA examinations regulations.

4.5.4.2 Equality analysis

Equality analysis is an integral part of examination policy, content and practice. The RCoA carries out objective, evidence-based equality analysis when making decisions relating to examination changes, policies, question writing and practices. This ensures that full consideration is given to the effect such decisions may have on the fairness of the examination, and aims to prevent discrimination, promote diversity and inclusivity for all groups of people.

4.5.5 Quality assurance

A full Person Specification and Job Description is provided for examiners. The FRCA Examiner Appointment and Selection Regulations give full details of all parts of the selection and appointment process used by the RCoA.

All FRCA examiners are experienced consultants, and the RCoA is fortunate that most examiners are able to commit to at least 10 days examining per year, and with the vast majority of examiners committing to a 10-year term. This ensures consistency in the boards of examiners and gives all examiners regular exposure to examining and the examination process.

Examiner training is mandatory for new examiners, which includes the principles of assessment and taking part in mock examinations. Regular training sessions are held for existing examiners, and throughout their examiner term, all examiners undergo audit and appraisal.

All examiners are expected to undertake an annual E&D training session, which is arranged by the examinations department. The training varies from presentations, workshops and e-learning sessions, all of which are designed in-house and specific to the assessment methods used by the FRCA.

The FRCA examinations do not currently use lay examiners, although lay input is encouraged through attendance at committees and working groups. Members of the lay committee gave assistance and advice to examiners in the construction of OSCE communication and history questions.

4.6 Feedback

The RCoA believes it is important to provide feedback to candidates beyond a standard pass-fail result, to assist them in understanding and interpreting their overall result. The RCoA does not attempt to justify the result given or the marks awarded, whether overall or for specific sections or skill domains. Marks are awarded using strict guidelines. The decision on marks awarded is final and therefore papers cannot be remarked.

The first form of feedback on a candidate's performance is a pass-fail list, which is published on the examination pages of the RCoA website at a pre-announced date and time. Further feedback is provided to candidates in the form of a 'results letter'. The type of feedback given to candidates will vary according to the examination component, however, the RCoA has ensured that feedback meets the AoRMC and GMC's guidelines, and is in line with other medical colleges. All candidates, whether pass or fail, receive the same type of feedback. This is because the RCoA believes that the provision of numerical information about a candidate's examination performance not only assists with improving a candidate's performance at future examinations but also provides important information on which to base further continuing professional development.

The following feedback is provided in all examination results letters/feedback enclosures:

- confirmation of the candidate's pass-fail result
- confirmation of the number of attempts used/maximum number of attempts
- the examination pass mark as a raw score in relation to the maximum achievable test score (e.g. 315/420) and/or the percentage value (e.g. 75%).

The candidate's overall score as a raw score and/or as a percentage

In addition, candidates who sit the Primary and Final FRCA MCQ examinations receive a full breakdown of question performance against the areas of the curriculum/syllabus tested in the examination. Candidates who sit the OSCE are given a breakdown of the score they achieved in each station. Candidates who sit the SOEs are given their score for each section and are provided with examiner comments made on their performance.

The RCoA believes it is necessary to provide more detailed feedback where a candidate's performance on an OSCE and/or SOE is poor or causes concern. This feedback, along with suggestions for additional educational support, is sent to the candidate's tutor or senior anaesthetic consultant, and copied to the candidate concerned. The letter is designed to bring trainer and candidate together to discuss areas of concern and to agree on what additional training is needed before the next attempt.

4.7 Monitoring and Reviewing

The RCoA monitors pass rates of candidate cohorts including, but not limited to, ethnicity, anaesthetists in training, non-anaesthetists in training, number of attempts, and deanery/schools, to ensure that examinations are in line with GMC expectations. This process also attempts to identify other instances of differential attainment not currently captured.

Ethnic differences in attainment are a constant feature of medical education in the UK. The RCoA has a sharing agreement in place with the GMC and provides line-by-line candidate data to the GMC on an annual basis. This information is used to monitor the differential attainment gap for all college and faculty high-stake examinations. The RCoA is not an outlier in this respect, and the differential attainment gap seen in FRCA examinations remains in line with the majority of other colleges and faculties.

At the end of each academic year, the Chairs of the Primary and Final examinations submit an annual summary report on the performance of their examinations, which is published on the RCoA website. These annual reports are of value to examiners, Royal College departments, the GMC, trainers, anaesthetists in training and the public in general.

The FRCA examinations committee conduct in-house reviews of the examinations structure, standard setting methods, and the processes, policies and regulations used to ensure that FRCA examinations are as robust, valid, fair and up-to-date as possible.

The next Examinations Review Executive Group (EREG) is to be formed in January 2020, which will include internal and external members. The aim of the EREG is too oversee and conduct an in depth review of the FRCA examinations' purpose, validity, reliability, fairness and concordance with best practice. The EREG will submit a report on the findings and make recommendations for change to the Examinations Committee, Education, Training & Examinations Board, RCoA Council and Board of Trustees.

4.7.1 Interim changes to FRCA examinations

The RCoA is aware that the majority of medical colleges and faculties have now replaced MTF questions with SBAs and other MCQ item formats. The RCoA agree with the GMC's view that MTF questions do not lend themselves to testing the application of knowledge and problem solving that is so essential in clinical practice. Although, SBAs have been used in the FRCA MCQ examinations since 2011, the RCoA remains committed to replacing all MTFs with SBAs by September 2023. It is proposed that the move away from MTFs in both Primary and Final MCQs will be conducted in three separate phases:

- **Phase one:** To increase the number of SBA questions in the Final and Primary FRCA MCQ examinations and reduce the number of MTFs by amending the MCQ structure to 45 MTF questions and 45 SBA questions (50/50 split) **with effect from September 2020.**
- **Phase two:** To increase the number of SBA questions in the Final and Primary FRCA MCQ examinations and further reduce the reliance on MTFs by amending the MCQ structure to 60 SBA questions and 30 MTF questions **with effect from March 2022**.
- **Phase three:** To cease the use of MTF questions in the Final and Primary FRCA MCQ examinations **with effect from September 2023**.

The EREG in consultation with respective core groups reserve the final decision in regard to the overall examination structure of both Final and Primary FRCA MCQ examinations and the exact format of the items that will be used to replace MTFs.

5 Assessments in the workplace

5.1 Formative assessment

Formative assessment is *assessment for learning.* The goal of formative assessment is to monitor progress in order to offer on-going constructive feedback with the aim of improving performance. In formative assessment there is no grade or mark, no pass or fail. Formative assessment must provide good quality feedback; without this the process loses its purpose. Formative assessment encourages reflection on learning by the trainee and demonstrates to both the learner and trainer how the learner is progressing.

SLEs have been in use for over ten years and in that time have been revised so that they emphasise their formative function[7]. Integral to the SLEs are reflection on the learning event by the anaesthetist in training and feedback from the assessor. The purpose of feedback is to inform the learner about their work in relation to what is expected and direct them on how to improve. As part of this feedback the assessor can indicate what level of supervision the anaesthetist in training requires for that task or case and how they can improve in order to reach the level of supervision required. To facilitate this levels of supervision have been developed and a supervision/entrustment scale is included on some of the SLEs.

The levels of supervision/entrustment are 1 to 4.

A supervision scale will be used in a formative way to demonstrate progress by the trainee. It will be used to inform summative assessments such as the IAC and IACOA.

Figure 5 – the levels of supervision

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

The educational supervisor should review the SLE with the anaesthetist in training to see how they are progressing and to ensure that they are acting on feedback received.

The main formative assessments used in the curriculum are the following SLEs:

5.1.1 Anaesthesia Clinical Evaluation Exercise (A-CEX)

The A-CEX is used during clinical sessions, and the assessments are based on the observed performance of the anaesthetist in training's skills, attitudes and behaviours, and knowledge. It looks at the anaesthetist in training's performance in a case rather than focusing on a specific procedure, for example the anaesthetic management of a patient with renal failure.

[7] Norcini, J. and Burch, V. (2007), 'Workplace Based Assessments as an Educational Tool: AMEE Guide 31'. *Medical Teacher,* vol. 29, pp 855-871.

5.1.2 Anaesthesia List Management Tool (ALMAT)

Similar to the A-CEX, the ALMAT is designed to assess and facilitate feedback on an anaesthetist in training's performance during their practice. When undertaking an ALMAT, an anaesthetist in training is given responsibility for the running of a surgical list according to their level of competence. This tool is particularly appropriate for more senior anaesthetists in training and allows assessment of both clinical and non-clinical skills. Anaesthetists in training should request this assessment before the start of the list, and they may be assessed either by the trainer with direct responsibility for that list, or it may be possible for an anaesthetist in training working with indirect supervision to be assessed by the nominated supervising consultant for that area.

5.1.3 Directly Observed Procedural Skills (DOPS)

The DOPS tool is used for assessing performance in procedures, such as arterial cannulation or epidural insertion. This tool is therefore more suited to Stage 1 training rather than Stage 2 or 3, except for new areas of anaesthetic practice, which should focus on higher level skills. They are useful for assessing anaesthetists in training who are learning a new skill e.g. nerve block.

5.1.4 Case-Based Discussion (CBD)

The CBD is usually used away from the clinical environment – it allows the assessor to question the anaesthetist in training about a clinical episode in order to assess their knowledge and rationale for their actions, or what they would do if presented with the clinical scenario. When undertaking a CBD, the anaesthetist in training should bring the case notes and/or anaesthetic chart of a case that they wish to discuss in retrospect. The conduct and management of the case as well as the standards of documentation and follow up should be discussed. CBDs offer an opportunity to discuss a case in depth and to explore thinking, judgement and knowledge. They also provide a useful forum for reflecting on practice, especially in cases of critical incidents.

5.1.5 Logbook

The LLp integrated logbook allows the anaesthetist in training's development as assessed by certain WBAs to be placed in context. It is not a formal assessment in its own right, but anaesthetists in training are required to keep a log of all anaesthetic, pain and ICM procedures they have undertaken including the level of supervision required on each occasion. The logbook demonstrates breadth of experience and a logbook review should consider the mix of cases, level of supervision and balance of elective and emergency cases, if relevant, for the learning outcome.

5.1.6 Multi-Source Feedback (MSF)

The MSF, unlike the other WBAs, provides specific feedback on generic skills such as communication, leadership, team working, reliability, etc., across the domains of Good Medical Practice from a wide range of individuals who have worked with the anaesthetist in training in the current training year. Other WBAs are a snap shot in time covering a clinical episode, where the MSF is used to measure a anaesthetist in training's performance across a broader period of time and informs the assessment of achievement of learning outcomes.

Anaesthetists in training are required to have at least one MSF completed for each training year and MSFs can be conducted in anaesthesia, pain medicine or ICM. The anaesthetist in training identifies a minimum of 12 people (who should be from a mixture of disciplines) with whom they have worked, for example, consultants, theatre staff, recovery staff, ODPs, midwives and administrative staff, and sends a request through the LLp.

5.1.7 Anaesthetic Quality Improvement Project Assessment Tool (A-QIPAT[8])

Quality improvement is a key element of professional practice. The A-QIPAT form is introduced in this curriculum to enhance assessment of this learning outcome. This assessment allows individuals who have worked with the anaesthetist in training to comment on their performance as part of a quality improvement project. This is a very useful way to provide the anaesthetist with feedback that is specific to their performance in quality improvement projects.[9]

5.1.8 Multiple Trainer Reports (MTRs)

Consultant feedback is a mandatory part of completing a learning outcome, and should assure whoever signs the HALO form that the trainee is considered competent to provide anaesthesia and peri-operative care to the required level in this learning outcome.

The MTRs differs from an MSF as it concerns an anaesthetist's training progress with key capabilities and learning outcomes. MSFs seek feedback from the multidisciplinary team, including consultants, on overall professional behaviour and attitude.

The current RCoA consultant feedback form has been developed to provide reports that give feedback across *all* the learning outcomes. Consultant feedback will be collated through the LLp and will form part of the Educational Supervisor's Structured Report (ESSR). At least one MTR will be required per year of training, and for certain areas of training specific MTRs will be required. This includes paediatric, cardiac, neuro and obstetric anaesthesia.

Consultant feedback will be collated, linked to the learning outcome and presented in the ESSR at ARCP. It should be discussed with the trainee during or at the end of a learning outcome prior to sign-off.

5.2 Summative assessments

Summative is an *assessment of learning* and is used to evaluate learning against an agreed and predetermined benchmark. Summative assessments count towards progression decisions. They demonstrate to both the learner and trainer that the learner has crossed the threshold of a waypoint and is now eligible to proceed to undertake training or other assessments of a greater degree of complexity. Summative assessment in the workplace test the higher levels of Miller's Pyramid ('shows how' and 'does').[10]

The main workplace summative assessments used in the curriculum are:

5.2.1 IAC

The IAC is the first critical progression point in the anaesthetic curriculum, and the anaesthetic element of the ACCS curriculum.

This comprises three arenas of professional activity:

- safe general anaesthesia with spontaneous respiration to ASA 1-2 patients for uncomplicated surgery in the supine position
- safe rapid sequence induction for ASA 1-2 patients aged 16 or older and failed intubation routine
- safe perioperative care to ASA 1E – 2E patients requiring uncomplicated emergency surgery.

[8] AoMRC - https://www.aomrc.org.uk/wp-content/uploads/2019/06/Developing_QI_into_practice_0619.pdf

[9] AoMRC Final QI Curriculum January 2019

[10] Miller, G. (1990). The assessment of clinical skills/competence/performance. Academic Medicine, 65.

The purpose of the IAC is to signify that the anaesthetist in training has achieved a basic understanding of anaesthesia and is able to give anaesthetics at a level of supervision commensurate with the individual anaesthetist in training's skills and the clinical case; and the anaesthetist in training can be added to the on-call rota for anaesthesia. The IAC is not a licence for independent anaesthetic practice.

SLEs used as formative assessments during the training period should demonstrate progress and when used to assess the IAC, at the end of the relevant training period, should show a consistent level of supervision/entrustment of 2b.

The IAC will also take into account logbook data, consultant feedback and achievement of specific learning objectives from simulation training.

A consultant, recognised by the GMC as a trainer, will be required to sign the IAC certificate.

5.2.2 IACOA

The IACOA must be obtained by all anaesthetists in training before being considered safe to work in an obstetric unit without direct supervision.

This comprises four arenas or professional activity:

- safe administration of epidural/CSE for pain relief in labour
- safe administration of epidural top-up for an emergency caesarean section
- safe administration of spinal/CSE for elective or emergency caesarean section
- safe administration of general anaesthesia for elective or emergency caesarean section.

As with the IAC, SLEs are used as formative assessment during this training period and they should show a consistent supervision/entrustment level of 3 by the end of this period of training so that the trainee can take part in the obstetric anaesthesia on call rota.

The IACOA will also take into account logbook data, consultant feedback and achievement of specific learning objectives from simulation training.

Achieving the IACOA does not signal the completion of training in obstetrics during Stage 1. Further training will be required in order to attain the required key capabilities.

A consultant, recognised by the GMC as a trainer, will be required to sign the IACOA certificate.

5.2.3 Holistic Assessment of Learning Outcomes (HALO)

A satisfactorily completed HALO form provides evidence that an anaesthetist in training has achieved the key capabilities required to demonstrate attainment of a stage learning outcome, in order to progress to the next. Supervisors should draw upon a range of evidence including the logbook of cases completed, WBAs, illustrations set out in the curriculum document, and consultant feedback to inform their decision as to whether the stage learning outcome has been achieved. The logbook review should consider the mix of cases, level of supervision and balance of elective and emergency cases, if relevant, for the stage learning outcome. Evidence for achievement of key capabilities and learning outcomes will be uploaded to the LLp and will be linked by the anaesthetist in training to the relevant stage learning outcome. The supervisor will be able to review this evidence at the end of a stage of training to complete the HALO but it is expected that the evidence will be collected and linked throughout the stage of training period so that educational supervisors and ARCP panels are able to review progress.

All hospitals must identify appropriate designated trainers to sign the HALO form for each stage learning outcome. Each trainer should be familiar with the requirements for the stage learning

outcome and be able to provide guidance for anaesthetists in training who have not yet achieved the learning outcomes. It is anticipated that the HALOs for the generic professional capability based stage learning outcomes will be signed by the anaesthetist's educational supervisor. **The professional judgement of the supervisor will ultimately determine whether it is appropriate to sign the HALO form for an anaesthetist in training.**

5.2.4 Multiple Trainer Reports (MTRs)

Consultant feedback is a mandatory part of completing a learning outcome and should assure whoever signs the HALO form that the trainee is considered competent to provide anaesthesia and peri-operative care to the required level in this domain of learning.

MTRs will be required evidence for a completion of HALO form. The MTR will need to show that consultant feedback supports completion of the learning outcomes for the stage of training. The number of MTRs will vary depending on the domain of learning. Those with large contents such as general anaesthesia will require several MTRs covering different areas of practice. However, a single MTR may cover multiple domains.

5.2.5 Educational supervisors structured report (ESSR)

The LLP system allows for multiple ESSRs per year that can be completed at intervals reflective of individual training programmes, as agreed between an anaesthetist in training and an educational supervisor. These will all subsequently feed into an ARCP.

The ESSR will periodically (at least annually) record a longitudinal, global report of an anaesthetist in training's progress based on a range of assessment, potentially including examinations and observations in practice or reflection on behaviour by those who have appropriate expertise and experience. The ESSR can incorporate commentary or reports from longitudinal observations, such as from supervisors or formative assessments demonstrating progress over time.

5.2.6 Entrustable Professional Activities (EPAs)

The RCoA utilises supervision/entrustment scales for SLEs (DOPS, A-CEX, ALMAT, and CBDs) within the curriculum to provide formative assessment and meaningful feedback on the level of supervision that was required for anaesthetists in training undertaking clinical activities. Entrustable professional activities (EPAs) involve looking across a range of different skills and behaviours to make global decisions about an anaesthetist in training's suitability to take on particular responsibilities or tasks and help to establish an increase in autonomy and responsibility for the unsupervised practice of key activities. (ten Cate, 2013) Unlike conventional WBAs that assess previous activity, EPAs focus on an anaesthetist in training's ability to cope with future situations and challenges. (Peters, 2017[11])

This curriculum embeds EPAs at two critical progression points to make summative decisions on defined areas of practice confirming that the trainee is able to undertake specific responsibilities safely and independently. These summative assessments will be undertaken by 'training faculty members ' who have observed an anaesthetist in training's performance on multiple occasions and who utilise all available sources of relevant information including; SLEs, clinical logbook, supervisor reports, MSF, and MTRs. Utilising all the relevant information available at each progression point for

[11] Harm Peters, Ylva Holzhausen, Christy Boscardin, Olle ten Cate & H. Carrie Chen (2017) Twelve tips for the implementation of EPAs for assessment and entrustment decisions, Medical Teacher, 39:8, 802-807, DOI: 10.1080/0142159X.2017.1331031

individual anaesthetists in training will ensure that the curriculum is underpinned by a programmatic approach to assessment[12].

The EPAs are centred on an anaesthetist in training's ability to join the on-call rotas for general and obstetric anaesthesia and are widely recognised as priority areas in which entrustment decisions are required to ensure patient safety.

5.2.6.1 Initial Assessment of Competence

This comprises three arenas of professional activity:

- safe general anaesthesia with spontaneous respiration to ASA 1-2 patients for uncomplicated surgery in the supine position
- safe rapid sequence induction for ASA 1-2 patients aged 16 or older and failed intubation routine
- safe perioperative care to ASA 1E – 2E patients requiring uncomplicated emergency surgery.

5.2.6.2 Initial Assessment of Obstetric Competence

This comprises four arenas of professional activity:

- safe administration of epidural/CSE for pain relief in labour
- safe administration of epidural top-up for an emergency caesarean section
- safe administration of spinal/CSE for elective or emergency caesarean section
- safe administration of general anaesthesia for elective or emergency caesarean section.

5.2.7 Validity of SLEs

SLEs have been developed in line with internationally agreed principle and guidelines to ensure that they are valid assessments and fit for purpose.[13].

5.3 Stage of training certification

5.3.1 Stage 1 Training Certificate

The Stage 1 Training Certificate signifies that an anaesthetist in training has achieved the required HALOs in all learning outcomes for that stage of training, has passed the Primary FRCA, and is eligible to progress to Stage 2.

5.3.2 Stage 2 Training Certificate

The Stage 2 Training Certificate signifies that an anaesthetist in training has achieved the required HALOs in all learning outcomes for that stage of training, has passed the Final FRCA, and is eligible to progress to Stage 3.

5.3.3 Stage 3 Training Certificate

The Stage 3 Training Certificate signifies that an anaesthetist in training has achieved the required HALOs in all learning outcomes for that stage of training and is eligible for the award of a CCT or CESR[CP].

---

[12] Lambert W. T. Schuwirth & Cees P. M. Van der Vleuten (2011) Programmatic assessment: From assessment of learning to assessment for learning, Medical Teacher, 33:6, 478-485, DOI: 10.3109/0142159X.2011.565828

[13] Criteria for good assessment: Consensus statement and recommendations from the Ottawa 2010 Conference

6 Guidance for ARCP

The ARCP is the formal process where training progress is reviewed, usually on an annual basis. This process should be used to collate and systematically review evidence about an anaesthetist in training's performance and progress in a holistic way and make decisions about their achievement of expected outcomes and subsequent progression in training.

Throughout training, anaesthetists should engage with the learning process by using the LLp to demonstrate that they are meeting the requirements of the curriculum.

The evidence collected on the LLp includes:

- placements in programme
- examination outcomes
- milestones such as training certificates
- personal development plans
- logbook data
- evidence of supervisory meetings
- supervised learning events and other evidence for HALOs
- MSFs
- MTRs
- evidence of reflection.

This evidence should form the basis of the ESSR that is reviewed at the ARCP and considered when awarding an ARCP outcome. A satisfactory outcome at the ARCP is required in order to progress through the training programme. The ARCP process is described in the 'Gold Guide' and the Deaneries are responsible for organising and conducting ARCPs. The evidence to be reviewed by ARCP panels should be collected in the trainee's LLp.

The decisions made at critical progression points and upon completion of training should be clear and defensible. They must be fair and robust and make use of evidence from a range of assessments, potentially including examinations and observations in practice or reflection on behaviour by those who have appropriate expertise or experience.

Assessment of attainment of the learning outcomes involves looking across a range of different skills and behaviours to make global decisions about an anaesthetist's suitability to progress in training. The domains of learning grids in section 5.10 of the *2020 Curriculum for a CCT in Anaesthetics* set out the high-level description of attainment to be achieved for each domain at the end of each stage of training in order to progress to the next.

As a precursor to ARCPs, the RCoA strongly recommend that anaesthetists in training have an informal LLp review either with their educational supervisor or arranged by the local school of anaesthesia. These provide opportunities for early detection of anaesthetists whose evidence of training progress may not be sufficient to attain a satisfactory outcome in their ARCP.

In order to guide the anaesthetists in training, their supervisors and the ARCP panel, the RCoA has produced ARCP guidance that sets out the requirements for a satisfactory ARCP outcome at the end of each stage of training and critical progression point. The ARCP decision aid is available on the RCoA website.

Figure 6 – minimum annual requirements for satisfactory ARCP

CT1	IAC
	Satisfactory progression with key capabilities
CT2	IACOA
	Satisfactory progression with key capabilities
CT3	HALOs for Stage 1 learning outcomes for all domains
	Primary FRCA examination pass
ST4	Satisfactory progression with key capabilities
ST5	Final FRCA examination pass
	HALOs for Stage 2 learning outcomes for all domains
ST6	Satisfactory progression with key capabilities
ST7	HALOs for Stage 3 learning outcomes for all domains
	HALOs for special interest training

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