

College of Anaesthesiologists of Ireland



Initial Assessment of Competence (IAC)

Revised June 2019

Initial Assessment of Competence (IAC)

Before being permitted to practice anaesthesiology without **direct supervision**, all trainees must achieve a satisfactory standard in an assessment of competency involving at least two consultant anaesthesiologists who are trainers. **This applies to all trainees in their first rotation on the SAT programme.** This initial assessment is designed to demonstrate the possession of basic key components of clinical skill, knowledge and other attributes necessary to progress in the specialty. **Until this assessment is completed successfully, no SAT should deliver anaesthesia without direct supervision either during daytime or 'out-of-hours'.**

It is intended that this assessment should be completed by a trainee after approximately 3 months of full-time training in anaesthesiology, but the exact timing will need to be determined on an individual basis. More experienced trainees who are working in Ireland for the first time, or a SAT trainee who has previously had stand-alone positions, whatever their grade, could be assessed much earlier than 3 months, after a relatively short period of familiarisation.

Before undergoing the Initial Assessment of Competence (IAC), the trainee must provide evidence of in date Advanced Cardiac Life Support (ACLS) certification. The IAC cannot be completed without evidence of in date ACLS certification.

The trainee will be assessed in the following areas:

- I. Preoperative assessment.
- II. General anaesthesia for ASA I or II patients (including equipment and anaesthesia machine check) for patients of Surgical Severity (SS) 1 + 2.
- III. Rapid sequence induction.
- IV. Clinical judgement, attitudes and behaviour

The skills, knowledge and attitudes expected and the assessment details are given below. The patients seen by SATs will need to be selected so as to be appropriate to the trainees' limited exposure within the specialty and should always be of ASA I or II. **Assessments will be formal. Both the assessment and its outcome must be recorded in departmental records and in the trainee's personal record. Should a trainee be assessed as unsatisfactory in any area, and thus be referred for further closely supervised training, the reasons for this referral must be recorded. The names of assessors must be legible, as must any additional comments.**

Following the assessment:

If satisfactory; trainees may begin to undertake cases delegated to them, without direct supervision and may be given increased clinical responsibility (for example by working on the 'on-call' rota with indirect or distant supervision.)

If unsatisfactory; trainees will need targeted instruction and a re-test. Whether the whole assessment is to be repeated, or targeted at deficient areas is a decision to be taken by the trainers, with regard to local circumstances, and is left to the discretion of the assessors.

Details of the Initial Assessment of Competence and its method of assessment

This assessment is in 4 parts;

- I. Preoperative assessment
- II. General anaesthesia for ASA I or II patients (including equipment and anaesthesia machine checks) for Surgical Severity (SS) 1 + 2.
- III. Rapid sequence induction
- IV. Clinical judgement, attitudes and behaviour

Only after this assessment has been satisfactorily completed can a trainee progress beyond direct supervision. Each of the 4 parts of the assessment (i – iv, above) can be assessed by one (or more) trainers, but not all 4 parts can be “signed off” by the same single trainer. At least two trainers must be involved in the overall assessment.

i) Pre-operative assessment

Clinical skills

1. Is able to demonstrate satisfactory communication with staff and patients.
2. Is able, in a manner appropriate to the patient, to take a relevant history.
3. Is able to perform a satisfactory clinical examination.
4. Is able to assess the airway including Mallampati score, Thyromental distance etc.
5. Explain the necessary aspects of Anaesthesiology and answer patient questions.
6. Is able to recognise potential problems requiring senior help
7. Is able to explain the management of post-operative pain and symptom control in a manner appropriate to the patient
8. Is able to order and interpret basic investigations (FBC, U & Es, Chest X Ray, ECG)
9. Is able to choose and prescribe an appropriate pre-medication where appropriate.

Knowledge

1. The ASA Physical Status Classification System.
2. The relevance of common inter-current diseases to anaesthesia and surgery.
3. Knowledge of relevance of the patient's medications to anaesthesia and surgery.
4. Consent for anaesthesia.
5. Predictors of difficult intubation
6. DAS guidelines

Setting

Patients: All appropriate patients aged 16 and over.

Assessments:

Case Based Discussions (CBD's)

Guidance:

This is a preliminary assessment to ensure that the trainee communicates adequately and understands the broad outline of anaesthesia assessment. After three months of training the trainee should be expected to identify patients who are low risk from the anaesthesiologist's point of view. There is no expectation of the trainee being able to determine the fitness of patients for operation who are severely ill or who have inter-current disease. The expectation is that they will know which cases to refer to or discuss with senior colleagues. The trainee should have an understanding of whatever premedication he or she intends to use.

Assessment of the Pre-operative Visit

The trainee must be firstly be observed in Pre Assessment Clinic and secondly accompanied on a ward based pre-operative evaluation of patients.

Name of trainee.....

| The Trainee: | Yes | No |
|--|--------------------------|--------------------------|
| Communicates in a satisfactory manner with patients | <input type="checkbox"/> | <input type="checkbox"/> |
| Obtains relevant history | <input type="checkbox"/> | <input type="checkbox"/> |
| Undertakes a physical examination | <input type="checkbox"/> | <input type="checkbox"/> |
| Assesses the airway | <input type="checkbox"/> | <input type="checkbox"/> |
| Understands the pre-operative investigations | <input type="checkbox"/> | <input type="checkbox"/> |
| Explains anaesthesia clearly | <input type="checkbox"/> | <input type="checkbox"/> |
| Discusses pain and explains post operative analgesia clearly | <input type="checkbox"/> | <input type="checkbox"/> |
| Prescribes pre-operative medication as needed | <input type="checkbox"/> | <input type="checkbox"/> |
| Understands the ASA classification | <input type="checkbox"/> | <input type="checkbox"/> |
| Understands consent for anaesthesia and operation | <input type="checkbox"/> | <input type="checkbox"/> |
| This assessment was completed satisfactorily | <input type="checkbox"/> | <input type="checkbox"/> |

IF NO, GIVE REASONS:

Tutor: Signed Print name..... Date

Trainee: Signed: Print name Date.....

Copy given to trainee for portfolio? Yes

ii): Administration of a safe general anaesthesia to an ASA I or II patient.

Clinical skills

1. Explanation of the anaesthesia procedure(s) and surgery to the patient.
2. Appropriate choice and knowledge of anaesthesia technique and ability to explain this to patient.
3. Pre-use equipment checks as per AAGBI guidelines
4. Proper placement of I.V. cannula using local guidelines.
5. Attachment of standard monitoring before induction of anaesthesia
6. Takes pre-induction measurement
7. Pre-oxygenation.
8. Satisfactory induction technique.
9. Appropriate management of the airway.
10. Maintenance of anaesthesia, including analgesia.
11. Appropriate perioperative monitoring and its interpretation
12. Recognition and immediate management of any adverse events which might occur
13. Proper measures during emergence from general anaesthesia and appropriate recording of anaesthesia / drugs / sign observations.
14. Satisfactory hand over to recovery staff.
15. Accurate completion of anaesthesia and other records.
16. Prescription of appropriate post-operative analgesia and anti-emetics
17. Choice of post operative oxygen therapy.
18. Instructions for continued I.V. therapies (if relevant).

Knowledge

1. The effects of anaesthesia induction on cardiac and respiratory function
2. The rationale for pre-oxygenation.
3. Methods available for the detection of misplaced ET tubes, including capnography
4. Common causes of arterial desaturation (cyanosis) occurring during induction, maintenance and recovery
5. Common causes and management of intra-operative hypertension and hypotension
6. The immediate management only of cyanosis, apnoea, inability to ventilate, aspiration, bronchospasm, anaphylaxis and malignant hyperpyrexia
7. Trainees must demonstrate an adequate, basic, practical knowledge of Anaesthesiology pharmacology to support their practice, for example, know about: 2 induction agents, 2 volatile agents, 2 opioids, suxamethonium and 1 competitive relaxant.
8. Knowledge of DAS guidelines

Setting

Patients: ASA I and II patients age 16 years and over requiring surgery and Surgical Severity 1 + 2 in the supine position e.g. hernia, varicose veins, hysterectomy, arthroscopy.

Location: Operating theatre.

Situations: Directly supervised anaesthetic techniques.

Assessments

- Direct Observation of Procedural Skills (DOPS)
- Case Based Discussion (CBD)
- Mini-CEX

Guidance

The trainee should be observed undertaking a number of cases using facemask and airway, and/or laryngeal mask and/or endotracheal tube. Care should be taken to ensure that the trainee is skilled in use of bag and mask and does not always rely on the laryngeal mask. The assessor should let the trainee proceed largely without interference and note problems of technique. This should be combined with a question and answer session covering the underlying comprehension of the trainee. The level of knowledge expected is that of a trainee who has been working in Anaesthesiology for 3 months and should be sufficient to support the specified clinical skills. Exclusions are specialised surgery, rapid sequence induction and children under the age of 16 years.

Assessment of ability to administer a general anaesthesia to an elective ASA I or II patient.

Name of trainee

(a) General anaesthesia with BMV +/-LMA

| The Trainee: | Yes | No |
|--|--------------------------|--------------------------|
| Properly prepares the anaesthesiology room and / or operating theatre | <input type="checkbox"/> | <input type="checkbox"/> |
| Satisfactorily conducts a pre-operative equipment check (including the anaesthesia machine and breathing system) | <input type="checkbox"/> | <input type="checkbox"/> |
| Has properly prepared and assessed the patient for surgery | <input type="checkbox"/> | <input type="checkbox"/> |
| Chooses an appropriate anaesthesiology technique | <input type="checkbox"/> | <input type="checkbox"/> |
| Establishes IV access | <input type="checkbox"/> | <input type="checkbox"/> |
| Establishes ECG and pulse oximetry | <input type="checkbox"/> | <input type="checkbox"/> |
| Measures the patient's blood pressure prior to induction | <input type="checkbox"/> | <input type="checkbox"/> |
| Pre-oxygenates as necessary | <input type="checkbox"/> | <input type="checkbox"/> |
| Induces anaesthesia satisfactorily | <input type="checkbox"/> | <input type="checkbox"/> |
| Manages airway competently | | |
| I) Face mask (+/-) airway | <input type="checkbox"/> | <input type="checkbox"/> |
| II) LMA | <input type="checkbox"/> | <input type="checkbox"/> |
| Makes satisfactory transfer to operating theatre (if applicable) | <input type="checkbox"/> | <input type="checkbox"/> |
| Positions patient safely | <input type="checkbox"/> | <input type="checkbox"/> |
| Maintains and monitors anaesthesia satisfactorily | <input type="checkbox"/> | <input type="checkbox"/> |
| Conducts emergence and recovery safely | <input type="checkbox"/> | <input type="checkbox"/> |
| Keeps an appropriate and legible anaesthesia record | <input type="checkbox"/> | <input type="checkbox"/> |
| Prescribes analgesia appropriately | <input type="checkbox"/> | <input type="checkbox"/> |
| Properly supervises discharge of patient from recovery | <input type="checkbox"/> | <input type="checkbox"/> |
| Understands the need for oxygen therapy | <input type="checkbox"/> | <input type="checkbox"/> |
| This assessment was completed satisfactorily | <input type="checkbox"/> | <input type="checkbox"/> |
| IF NO, GIVE REASONS: | | |

Tutor: SignedPrint name..... Date.....

Trainee: SignedPrint name..... Date

Copy given to trainee for portfolio? Yes/No

(b) General anaesthesia with endotracheal intubation.

Name of trainee.....

In addition to the above, the trainee must demonstrate the following:

| | Yes | No |
|--|--------------------------|--------------------------|
| Assesses the airway properly | <input type="checkbox"/> | <input type="checkbox"/> |
| Knowledge of factors which may make intubation difficult | <input type="checkbox"/> | <input type="checkbox"/> |
| Satisfactory use of laryngoscope | <input type="checkbox"/> | <input type="checkbox"/> |
| Correct placement of endotracheal tube* | <input type="checkbox"/> | <input type="checkbox"/> |
| Demonstrates position of endotracheal tube by | | |
| (i) observation | <input type="checkbox"/> | <input type="checkbox"/> |
| (ii) auscultation | <input type="checkbox"/> | <input type="checkbox"/> |
| (iii) capnography | <input type="checkbox"/> | <input type="checkbox"/> |
| Knowledge of DAS guidelines | <input type="checkbox"/> | <input type="checkbox"/> |
| This assessment was completed satisfactorily | <input type="checkbox"/> | <input type="checkbox"/> |
| IF NO, GIVE REASONS: | | |

Tutor: Signed..... Print name..... Date.....

Trainee: Signed.....Print name..... Date.....

Copy given to trainee for portfolio? Yes

*If intubation is not possible, the trainee should maintain the airway and allow the assessor to intubate the patient.

iii) Rapid Sequence Induction for an ASA I or II patient.

Clinical skills

1. Detection of risk factors relating to slow gastric emptying, regurgitation and aspiration.
2. Use of drugs (antacids, H₂ receptor antagonists etc) in the management of the patient at risk of aspiration
3. Explanation of pre-oxygenation to the patient
4. Proper explanation of rapid sequence induction (RSI) to patient.
5. Proper demonstration of cricoid pressure to the patient and assistant.
6. Demonstration of the use of:
 - a) Trendelenberg position
 - b) suction
 - c) oxygen flush
7. Appropriate choice of induction and relaxant drugs.
8. Attachment of ECG, pulse oximeter and measurement of BP before induction.
9. Pre-oxygenation.
10. Satisfactory rapid sequence induction technique.
11. Demonstration of proper measures to minimise aspiration risk during emergence from anaesthesia.

Knowledge

1. Risk factors causing regurgitation and aspiration.
2. Factors influencing gastric emptying, especially trauma and opioids.
3. Fasting periods in relation to urgency of surgery
4. Reduction of the risks of regurgitation.
5. Failed intubation drill, emergency airways
6. The emergency treatment of aspiration of gastric contents
7. Basic pharmacology of suxamethonium and repeated doses.

Setting

Patients: Fasting ASA I and II patients aged 16 and over having uncomplicated elective or urgent surgery with normal upper airway anatomy.

Location: Operating theatre.

Situations: Supervised theatre practice.

Assessments

- Direct Observation of Procedural Skills (DOPS)
- Case Based Discussion (CBD)
- Mini-CEX

Guidance

This assessment should ensure competent management of the airway during straightforward urgent surgery. The assessment must be done on a patient who is adequately starved prior to induction of anaesthesia. The patient may, or may not be, an urgent case. The trainee should be able to discuss methods of prediction of the difficult airway and of difficult intubation. They should be able to explain the failed intubation drill, and the immediate management of the patient that aspirates gastric contents.

Assessment of Rapid Sequence Induction

Name of trainee.....

The Trainee must demonstrate:

| | Yes | No |
|---|--|--|
| Preparation of the Anaesthesiology room and operating theatre | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| Satisfactorily checking of the anaesthesia machine, suction, oxygen | | |
| Preparation of the patient (information and positioning) | <input type="checkbox"/> | <input type="checkbox"/> |
| An understanding of the mandatory periods for pre-operative fasting | <input type="checkbox"/> | <input type="checkbox"/> |
| An understanding of the indications for RSI | <input type="checkbox"/> | <input type="checkbox"/> |
| An adequate explanation of RSI to the patient, including cricoid pressure | <input type="checkbox"/> | <input type="checkbox"/> |
| Demonstration to the assistant how to apply cricoid pressure | <input type="checkbox"/> | <input type="checkbox"/> |
| Proper pre-oxygenation of the patient | <input type="checkbox"/> | <input type="checkbox"/> |
| The undertaking of a RSI | <input type="checkbox"/> | <input type="checkbox"/> |
| Correct placement of endotracheal tube | <input type="checkbox"/> | <input type="checkbox"/> |
| This assessment was completed satisfactorily | <input type="checkbox"/> | <input type="checkbox"/> |
| IF NO, GIVE REASONS: | | |

Tutor: Signed.....Print name..... Date.....

Trainee: Signed.....Print name..... Date.....

Copy given to trainee for portfolio?

Yes/No

iv): Clinical judgement, professional attitudes and behaviour

At this early stage in a trainee's career all that is required is confirmation of the statement on the assessment sheet below.

Assessment of clinical judgement, professional attitudes and behaviour

Name of trainee _____

To the best of my knowledge and belief this trainee has

1. Shown care and respect for patients
2. Demonstrated a willingness to learn
3. Asked for help appropriately
4. Appeared reliable and trustworthy

Tutor: Signed..... Print name..... Date.....

Trainee: Signed..... Print name..... Date.....

Copy given to trainee for portfolio? **Yes**