

Edge Hill University

HEA3183: Anaesthetic Care

Practice Assessment Document (Competencies)

Student Name:

Student Number:

Professional Registration:

Introduction

In the UK, anaesthesia is administered under the supervision of a medically trained anaesthetist. The profession has a good safety record, with morbidity and mortality figures which compare favourably with other first-world countries. The anaesthetist is either a fully qualified specialist or an experienced anaesthetist working under supervision.

Hospitals must provide a safe working environment for the practice of anaesthesia. Hospitals which have trainees may be subject to inspection by the Royal College of Anaesthetists to ensure that appropriate standards are maintained. Both the Royal College of Anaesthetists and the Association of Anaesthetists of Great Britain and Ireland would expect such standards to be maintained in all hospitals where anaesthesia is provided regardless of who administers it and recognise the competencies within this document as appropriate for this group of Health Professionals.

The provision of a suitably trained Anaesthetic Assistant (AA) is an essential safety standard, as published in the NHS Quality Improvement Scotland (NHS QIS)1 document 'Anaesthesia: Care Before, During and After Anaesthesia – Standards 1.4.1 and 1.4.2'

AAs are members of the theatre team. They are essential for the safe delivery of anaesthesia which requires two practitioners with complementary skills and knowledge. AAs are involved in many routine aspects of peri-operative care and play an important role in the safe management of unforeseen clinical adverse events.

The Purpose of this Document

The following pages set out a framework of 9 CORE competencies for AAs; The competencies meet the needs of the Association of Anaesthetists of Great Britain and Ireland referred to in the publication 'The Anaesthesia Team 3' (2010) and the current NHS QIS healthcare governance standards (2010).

The competencies do not include a number of mandatory training courses, such as moving and handling; basic life support; immediate life support; venepuncture and cannulation; intravenous therapy; safe blood transfusion and medical devices. This document is intended to build on such aspects of induction and orientation, rather than replace them.

Timeframe

These competencies should be used in tandem with a personal development plan, linked to Flying Start and the NHS Knowledge and Skills Framework.

Under normal circumstances it is expected that education and training follows the timeframe suggested by the SMA-SAC, with a further consolidation period undertaken during independent practice.

Month 1- 3 Supernumerary and supervised daytime work as appropriate

Months 3-9 Supervision as required during the day, supervised night work.

Months 9 on Confirmation of competencies, completion of training (including moving and handling, ILS and in-house practical skills training) Independent practice.

The following core competencies are subject to local guidelines and assessment and should be completed during supervised practice:

- immediate life support (ILS) (10.7)
- insertion of an IV cannula (3.3)
- IV drug administration / PCA (8.10 et seq)
- the siting of an LMA in an adult patient (4.15).

Attitudes and Values

The framework is underpinned by the NHS QIS healthcare governance standards (2005), to ensure that:

- patients' views and experiences are taken into account in the planning and delivery of services
- patients are involved in, and informed about, all decisions made during their journey of care
- systems are in place to ensure that patient safety is a core principle underpinning all aspects of healthcare delivery
- information is used appropriately to maximise benefit in all sectors of healthcare
- policies and procedures are in place to encourage and enable continuous quality improvement
- staff from across NHS Scotland are fully supported and adequately trained, both personally and professionally, to provide high quality
- health services
- quality systems are in place to enable employees to play a full and active role in providing effective and efficient healthcare services for patients
- structures and processes are in place for the adequate review of service delivery.

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Applied Practice forms – Competencies.

This document contains all competencies for HEA3183

How to complete the forms:

First meet with your allocated mentor and discuss the best way you can meet the competencies within these forms. This will enable you to gain an understanding of what is required to demonstrate that you can practice competently and consistently. The mentor's role is to guide you through the process and facilitate opportunities for you to gain evidence to show that you are a competent intra-operative practitioner.

1. You should start to work alongside your colleagues and clinicians and explore your knowledge in practice by asking questions. Your mentor will work along side you initially but then as you progress, they may adopt a stance of proximal supervision where you undertake clinical activities on your own.
2. Throughout this module you will be guided towards key documents that will form the core of your portfolio evidence. You will be advised on how to make best use of these documents to demonstrate your knowledge and understanding that underpins each clinical skill.
3. Make sure you continue to generate portfolio evidence to support the claim you are making at the end of the module. This is important as your mentor will review your progress against each competency not just by observation alone but through the reflective or other types of evidence contained in your portfolio.
4. In the [Assessment Method/Evidence] column you should indicate what method of assessment has been used and type of evidence you have within your portfolio (including location) to support your claim that you are competent in practice. You will note that there are already recommended **methods of assessment** listed in this column. These are included as a guide to your mentor as to what the most appropriate methods of assessment may be for that particular skill statement. Items listed in **BLOCK CAPITALS** are MANDATORY.
5. SSA = Student Self Assessment, MA = Mentor Assessment. Competence is recorded by marking a 0 [not yet competent] or a 6 [competence]. You are required to self-assess your competence prior to discussion with your mentor. Your mentor will also complete the MA boxes with [initialled] 0 or 6.
6. **If (for whatever reason) you are not competent and a zero is recorded then an action plan is required.** This is the case at Full-term as much as at Mid-term. Students will be offered one opportunity to be re-assessed following a fail-in-practice grade being recorded at full-term assessment. There is an opportunity to record this action plan on the reverse of the Full-term Assessment record (Page 6). Please discuss this matter further with your mentor and/or your module coordinator; if this is unresolved. It may be something simple that can easily be rectified by arranging an alternative allocation or study opportunity. Your

	Mid-term	Full-term
SS0	M0	SSA 6IA

action plan will reflect this discussion. Please note: you will not pass this module unless you are deemed competent in **ALL skill items.**

.....Mentor/Assessor Signature

7. The box to the right of the competency (illustrated) is to enable your mentor to sign to record competence against each skill item. Some circumstances may dictate that an assessor working in conjunction with your allocated mentor sign this. If this is the case then this must be counter signed by your allocated mentor. If you have been working with additional mentors, they too should sign in this box. This demonstrates both sets of mentors are in agreement with one another.

What to do next with the applied practice forms?

These forms have to be submitted either by hand or by postal mail to ensure the authenticity of signatures. The outcomes are then recorded at Edge Hill University. Your forms will be returned to you at a later date for inclusion in your portfolio. They are important because they will demonstrate to your employer your competency. You should take copies of your documents prior to posting.

Please return the document to your module coordinator at address below (see submission date in your handbook):

Edge Hill University
Faculty of Health
Armstrong House
Oxford Road
Manchester
M1 7ED

Module Code: HEA3183

Edge Hill University

Preliminary Interview:

The student and mentor should use this interview to discuss the competency document as a whole and note items for action planning. It is extremely important that skill items that can not be taught and assessed within the current allocation are identified and that an action plan is generated to address this.

Notes (Please reference to ACTION PLAN):

Signed...

Student: Date:

Mentor: Date:

Academic Supervisor: Date:

Module Code: HEA3183

Edge Hill University

Mid-term Assessment:

The student and mentor should use mid-term assessment to benchmark what has already been achieved against the skill statements. This will enable action planning for outstanding skill items. Use this page to note any potential problem areas. It is extremely important that skill items that can not be taught and assessed within the current allocation are identified and that an action plan is generated to address this need.

Notes (Please reference to ACTION PLAN):

Signed...

Student: Date:

Mentor: Date:

Academic Supervisor: Date:

Student Name.....

Action Plan

IN-DEX	ACTION	SKILL REF.	ACTION BY	TARGET DATE	COM-PLETED	NOTES
1	Immediate Life Support Course	SS 9.7	Practice Educator	January 2015		
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Student Name.....

Action Plan

IN-DEX	ACTION	SKILL REF.	ACTION BY	TARGET DATE	COM-PLETED	NOTES
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Module Code: HEA3183

Edge Hill University

Full-term Assessment:

At full-term the student should be competent in **ALL skill items**. A statement of unconditional competence should be made (bottom of page) by both the student and mentor, signed, dated and accompanied (validated) by both the student's and mentor's professional registration numbers. If this is not possible then a fail-in-practice grade will be recorded and a further ACTION PLAN MUST BE CONSTRUCTED to address this. Please use the additional form (overleaf) to record the outcome of any further action.

Summary:

I confirm that I.....(student) *have/have NOT consistently demonstrated competence in all of the enclosed skill statements.

Student:.....(PIN:.....) Date:.....

I confirm that(student) *has/has NOT consistently demonstrated competence in all of the enclosed skill statements.

Mentor:.....(PIN:.....) Date:.....

PRINT NAME:.....

Academic Supervisor:..... Date:.....

*Delete as appropriate

Edge Hill University

MENTOR IN PRACTICE - INFORMATION

Name (Please Print):

Registering Body (HCPC/NMC):

Registration PIN:

Ward / Dept:

Contact:
(tel no / email)

Post held:

Length of experience in specialism:

Qualification(s) for mentor role - ie ENB 997/998 : C&G 7306/7 other equivalent

Date(s) of qualification(s):

**NB : TO UNDERTAKE THE MENTOR ROLE IN PRACTICE AN ANNUAL
UPDATE IS REQUIRED**

Please give date of last update:

Please state location of update:

Details of academic qualifications:

Modules studied at Diploma /Degree level:

Signature of Mentor:

Edge Hill University

ASSESSOR - INFORMATION

Name (Please Print):

Registering Body (HCPC/NMC):

Registration PIN:

Ward / Dept:

Contact:
(tel no / email)

Post held:

Length of experience in specialism:

Qualification(s) for ASSESSOR role - ie ENB 997/998 : C&G 7306/7 other equivalent

Date(s) of qualification(s):

Details of academic qualifications:

Modules studied at Diploma /Degree level:

Signature of ASSESSOR:

Section 1 Preparation of Patients for Theatre

Fitness for Anaesthesia and Surgery

Many clinical factors identified pre-operatively have a bearing on perioperative anaesthetic care. The AA must be aware of the factors, which affect patient care, and should be able to outline how these factors might influence choice of anaesthetic technique. Pre-operative investigations are part of the perioperative safety net: clinically significant abnormal values should be identified by the AA and their risks understood. The AA should be able to identify many pre-operative risks (e.g. a missed ranitidine pre-med) and bring these to the attention of the anaesthetist.

The concept of the American Society of Anaesthesiologists (ASA) scoring system is international, and a foundation for assessing fitness for anaesthesia and surgery.

Airway assessment is an important part of anaesthetic assessment, and because the AA assists in securing the airway it is important that they understand how the anaesthetist anticipates difficulty with airway manipulations. Fasting protocols are designed to help protect patients from aspiration of gastric contents. These are part of routine pre-operative assessment, and the AA should be aware of those situations where the benefits of fasting are unpredictable, or where fasting is inappropriate. Transferring, positioning, and protecting the obese patient represents a shared challenge for the AA and the anaesthetist, as all aspects of local and general anaesthesia are made more difficult and more prone to complications.

1.1 Competency Understands the assessment, significance, and limitations of the ASA score

Knowledge and Skills

The ASA score, including its correlation with operative mortality. The anaesthetist may present a patient as 'ASA 4'; the AA must understand the important clinical implications of this.

Please use checkboxes to assist with assessment

Indicators

- Define the ASA classification.
- DISCUSS** the clinical differences between the ASA scores.
- DEMONSTRATE** ability to prepare anaesthetic room and theatre to provide individualised patient care taking into account ASA scores.

Method/Evidence

- Notes []
- **DISCUSSION** []
- **DIRECT OBSERVATION** []

Evidence items in **BOLD and CAPITALS** are Mandatory

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

1.2 Competency Aware of anaesthetic factors in the pre-operative clinical assessment of patients

Knowledge and Skills

Basic clinical assessment of cardiovascular, respiratory, renal, neurological, haematological, hepatic, endocrine and GI systems with emphasis on factors which have a bearing on anaesthetic care. The AA should recognise important factors affecting anaesthesia, (see the checklist-related competencies, 2.1 and 2.2) and know the more important clinical implications.

Indicators

- Use patient’s records to recognise those pre-existing medical conditions, which may adversely affect the patient during anaesthesia.
- Ensure anaesthetist and wider multidisciplinary team are aware of relevant Pre-existing medical conditions.

Method/Evidence

- Notes []
- Discussion []
- **PRE-OPERATIVE ASSESSMENT WORK-BOOK []**

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

1.3 Competency Aware of principles involved in assessing airway for potential difficulty with intubation and or ventilation

Knowledge and Skills

Clinical assessment of potential difficulty with intubation. Techniques, scoring / grading. The AA must understand the important clinical implications of Mallampati Score / Cormack and Lehane Grading.

Indicators

- Anticipate potentially difficult intubations.
- Identify and report any previous problems with anaesthesia.
- Discuss the Mallampati Score.
- Discuss the Cormack and Lehane system.

Method/Evidence

- Notes []
- **DISCUSSION []**
- **PRE-OPERATIVE ASSESSMENT WORK-BOOK []**

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

1.4 Competency Can state fasting guidelines, and clinical aspects of these

Knowledge and Skills

Fasting protocols, their clinical rationale, fasting risks, times when fasting is inappropriate. Essential to minimise risk of acid aspiration. AA must know when fasting may not achieve its goal, and anaesthetic implications of this.

Indicators

- Discuss the principles of pre-operative fasting.
- Discuss the local guideline for pre-operative fasting.
- Discuss strategies to minimise regurgitation.
- Discuss the circumstances when fasting may not prevent regurgitation.
- Discuss the management of regurgitation.
- Discuss the signs and management of aspiration.
- Discuss nationally produced guidelines .

Method/Evidence

- Notes []
- **DISCUSSION** []
- **ANNOTATED** Guidelines []


ANNOTATED means that you have either written on or about the policy/guidelines

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

1.5 Competency Understands the anaesthetic consequences of obesity

Knowledge and Skills

Definition of obesity, concept of BMI. Anaesthetic risks of obesity. Safely providing perioperative care to obese patients.

Indicators

- Define the term BMI and discuss the term obese.
- Discuss how obesity affects anaesthesia.
- Discuss the impact of surgical positioning.
- Anticipate the need for additional equipment to ensure patient safety and comfort.
- Recognise that weight bearing equipment must have sufficient load capacity and be fit for purpose.
- Use nationally produced guidelines to inform practice.

Method/Evidence

- Notes []
- **DISCUSSION** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

1.6 Competency Understands the significance of pre-operative investigations, and can demonstrate a basic level of interpretation

Knowledge and Skills

Pre-operative investigations.
 Clinical aspects of normal and abnormal values of: blood haemoglobin, platelets, white cell count, clotting studies, serum potassium, urea and creatinine, blood sugar, arterial blood gases.
 Takes appropriate action by highlighting clinically significant abnormal values.
 Basic ECG interpretation.

Indicators

- Discuss local recommendations for pre-operative investigations.
- Demonstrate ability to sample and interpret blood sugar.
- Discuss routine biochemical and haematological values.
- Discuss arterial blood gas values.
- Discuss the normal conducting pathway of the heart.
- Demonstrate ability to recognise sinus rhythm and significant dysrhythmias.
- Discuss national guideline for pre-operative investigations .

Method/Evidence

- Notes []
- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- Questions []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

1.7 Competency Understands principles involved in pre-medication and pre-operative therapy

Knowledge and Skills

Understands the purpose, basic pharmacology and clinical aspects of paediatric or adult pre-medication drugs (including topical LA cream), and therapies (including physiotherapy).

Indicators

- Discuss the role of pre-medication.
- Discuss commonly used pre-medication drugs.
- Discuss and describe effects of common pre-medication drugs.
- Demonstrate awareness of indications for topical LA cream.
- Discuss the need to continue therapies in the pre-operative phase.

Method/Evidence

- Notes []
- **DISCUSSION** []
- Questions []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

1.8 Competency Aware of roles and responsibilities of theatre personnel

Knowledge and Skills

Theatre team members, roles and responsibilities in routine care and during emergencies.
 Knowledge of clinical ability of theatre personnel is an important factor during clinical emergencies.

Indicators

- Demonstrate an understanding of the roles within the multidisciplinary team.
- Identify individual or shared responsibilities in the provision of care in an emergency situation.

Method/Evidence

- **ORGANISATION CHART** []
- **Questions** []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Section 2 Aspects of Patient Care

The local checklist applies, but must include the following categories of information:
 Patient identification; Fasting; Patient Preparation for Theatre Suite; Consent; Pre-operative investigations; Known Hazards; Allergies; Pre-medication.

The AA should understand the principles of obtaining or amending consent in pre-medicated patients, and should know the protocol for patients who are unable to give informed consent. The AA must understand infection risks and use standard precautions and appropriate additional precautions where relevant.

2.1 Competency Able to complete routine pre-operative checklist

Knowledge and Skills

Accurately acquires information required to complete pre-operative checklist.
 Avoids leading questions.
 Correctly identifies those situations when accuracy of information is likely to be compromised.
 Can highlight important aspects of checklist information and bring these to the attention of relevant team members – including where routine drug therapy has been given or withheld inappropriately.
 Systematically identifies the proposed site of operation and reports discrepancies to the appropriate person.

Please use checkboxes to assist with assessment

Indicators

- Discuss the rationale for the individual components of the local checklist.
- Discuss national guidelines (AfPP / NATN, 2004).
- Demonstrates awareness of situations which compromise patient checking procedures.
- Communicate information to the anaesthetist regarding administration of non-administration of drugs likely to impact on anaesthesia.
- Systematically identifies the proposed site of operation and reports discrepancies.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **ANNOTATED CHECKLIST** []
- **ANNOTATED WHO CHECKLIST** []

ANNOTATED means that you have either written on or about the policy/guidelines

Evidence items in **BOLD and CAPITALS** are Mandatory
 These are **ALL MANDATORY** Evidence items.

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

2.2 Competency Understands legal issues surrounding informed consent for anaesthesia and surgery

Knowledge and Skills

Legal issues relevant to informed consent for anaesthesia and surgery. The AA has an important role confirming the validity of consent to current legal standards. Demonstrates the ability to act as the patient's advocate and to support the patient appropriately in informed choices (*Adults with Incapacity Act (Scotland) 2000*). Understands consent issues for minors (*Consent for Children*, GMC document). Understands consent requirements for Jehovah's Witnesses.

Indicators

- Discuss the AA's role in communicating patient's concerns in regard to consent to the appropriate members of the multidisciplinary team.
- Demonstrate the rationale for patient identification and confirmation of consent with scrub practitioner.
- Discuss the Adults with Incapacity Act (Scotland) 2000.
- Discuss the law regarding consent for minors.
- Discuss the implications of Jehovah's Witnesses with regard to consent to receive blood products
- Demonstrate an awareness of the individual's right to withhold consent to receive blood products.
- Utilise nationally produced guidelines to inform practice.

Method/Evidence

- REFLECTIONS ON SCENARIOS x 3 (Law & Ethics Unit Worksheet) []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

General Patient Care

The AA must provide safe, holistic patient care, which is as far as possible, evidence-based. The professional practice of the AA must have a sound ethical and legal basis.

2.3 Competency Assesses, plans, implements and evaluates perioperative care

Knowledge and Skills

Demonstrates the ability to plan and accurately document all aspects of a perioperative care-plan for all patient groups.
Is able to modify a care-plan in response to changes in a patient's condition.

Indicators

- Utilises bio-psychosocial data where possible from pre-operative visits / pre-operative period to inform holistic care planning.
- Anticipates individual patient care requirements.
- Assess, plan, implement and evaluate effectiveness of interventions.

Method/Evidence

- **Anonymised CARE DOCUMENTATION and WRITTEN ANALYSIS of Practice []**
- **DIRECT OBSERVATION []**
- **Questions []**

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

2.4 Competency Able to maintain patient's comfort and dignity throughout the perioperative period

Knowledge and Skills

Maintains privacy, comfort and dignity as far as possible throughout the perioperative period.

Indicators

- Demonstrate concern and respect for the individual patient.
- Does not refer to patient by operation.
- Maintain patient dignity at all times.
- Provides additional patient warming with appropriate equipment as required.

Method/Evidence

- **Anonymised CARE DOCUMENTATION ANALYSIS of Practice []**
- **DIRECT OBSERVATION []**
- **Questions []**

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

2.5 Competency Recognises signs of anxiety, describes their adverse effects, and offers reassurance

Knowledge and Skills

Can assess a patient’s level of anxiety, offers appropriate reassurance.
 Recognises where anxiety may lead to patient harm, and acts appropriately to reduce anxiety where possible.
 Clinical effects of anxiety including altered drug dosages and increased risk of cardiac arrhythmias.
 Anxiety is common and may be distressing: the AA should ensure that they recognise anxiety and responds appropriately.

Indicators

- Demonstrate ability to recognise signs of patient anxiety.
- Promote autonomy by encouraging active participation by the patient in their treatment and care where appropriate.
- Provide information and the rationale to patients regarding anaesthetic procedures.

Method/Evidence

- **DIRECT OBSERVATION []**

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

2.6 Competency Demonstrates personal and professional accountability in relation to the role of an Anaesthetic Assis-

Knowledge and Skills

Demonstrates the principles of accountability in professional practice.
Practises within limitations of own scope of professional practice.

Indicators

- Behaves consistently with the NMC / HCPC professional standards
Recognise own limitations and seek advice from members of the multidisciplinary team.
- Reflect on own performance.
- Assume responsibility for personal development plan.
- Demonstrate knowledge of and apply to practice the following (where relevant):
 - Association for Perioperative Practice guidelines;
 - NHS Policies and Guidelines;
 - NMC guidelines;
 - HCPC guidelines;
 - NHS QIS standards and guidelines & Association of Anaesthetists guidelines
 - SIGN Guidelines.

Method/Evidence

- **DIRECT OBSERVATION** []
- **REFLECTIONS ON SCENARIOS x 3** (Law & Ethics Unit Worksheet) []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Care for Specific Patients

Confused, demented, or educationally impaired patients represent a challenge for the anaesthetic team. Management is highly individualised, and the AA must be able to play an appropriate part in assisting the anaesthetist. Carers, relatives, or interpreters may be permitted into the anaesthetic room and must be supported appropriately.

2.7, 2.8 Competencies Aware of management of confused patients or patients with incapacity

Able to assess and manage patients with learning disabilities

Knowledge and Skills

Shows an ability to assess the requirements of confused patients or patients with incapacity, and to protect them from undue distress.
Is patient and caring at all times.

Indicators

- Demonstrate ability to apply the *Adults with Incapacity Act* (Scotland) 2000. (See also 2.2)
- Demonstrate ability to assess and manage the requirements of confused patients or patients with incapacity.

Method/Evidence

- **DIRECT OBSERVATION** []
- **Law & Ethics Scenario 3** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

2.9 Competency This Competency has been incorporated into Common Theme 4.

2.10 Competency Able to assess and manage elderly or paediatric patients (as relevant to scope of normal practice)

Knowledge and Skills

Shows an ability to assess the requirements of elderly or paediatric patients (as normal practice), and to protect them from undue distress.
Is patient and caring at all times.

Indicators

- Use appropriate patient care and communication skills to protect the patient from undue stress as far as is reasonably practicable.

Method/Evidence

- **DIRECT OBSERVATION** []
- **Law & Ethics Scenario 3** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Section 3 *Involvement in Common Anaesthetic Procedures*

Securing IV access

Anaesthetised patients usually require peripheral IV access. The AA must be able to assist effectively in informing patients, management of failed IV cannulation, and those factors, which improve the success rate of this procedure. Inadvertent loss of IV access may be life threatening.

3.1 Competency Can assist anaesthetist during establishment of peripheral IV access

Knowledge and Skills

Demonstrates effective skin antisepsis and site preparation.
 Can effectively use venous tourniquets.
 Manages failed cannulation.
 Recognises strategies for increasing success-rate in patients who have 'difficult' veins.
 Aware of risks of infection to staff.

Indicators

- Discuss risk from blood borne pathogens to staff.
- Demonstrate an awareness of local hospital procedure in the event of accidental exposure to patient's blood.
- Select appropriate site for cannulation.
- Apply tourniquet correctly.
- Demonstrate ability to employ techniques which improve venous filling.
- Demonstrate ability to remove a cannula.
- Discuss prevention and management of needle-stick injury.
- Discuss importance of formally reporting any incident of exposure or near miss through hospital Risk Management procedures.

Method/Evidence

- Notes []
- **DISCUSSION** []
- **DIRECT OBSERVATION** []

Please use checkboxes to assist with assessment



Evidence items in **BOLD and CAPITALS** are Mandatory
 2 of these are **MANDATORY** Evidence items.



Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

3.2 Competency Able to secure an IV cannula or local anaesthetic catheter

Knowledge and Skills

Demonstrates ability to secure a cannula, local anaesthetic catheter or infusion line to minimise the possibility of accidental displacement.

Indicators

- Select and apply appropriate dressing and/or securing device.

Method/Evidence

- **DIRECT OBSERVATION** []
- Discussion []
- Questions []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

3.3 Competency Can site a peripheral intravenous cannula

Knowledge and Skills

Can select an appropriate vein, prepare the skin, site a peripheral intravenous cannula and confirm that it is patent.

Indicators

- Undertake appropriate local training and education prior to performing the clinical skill.

Method/Evidence

- **DIRECT OBSERVATION** []
- Discussion []
- Questions []

[Note where it is not possible to site a peripheral cannula due to local policy SIMULATION/Questioning should be deployed as the assessment method]

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Invasive monitoring is most often required during major surgery, or where patients have severe systemic disease. The AA **must** be able to assist the anaesthetist in establishing invasive monitoring. This is an essential part of the management of emergencies and may be the routine care of ASA 3, 4 and 5 patients.

3.4 Competency Can assist anaesthetist during establishment of invasive monitoring

Knowledge and Skills

Able to prepare all required equipment. Assists in positioning, supporting patient, skin preparation, and helping to prevent inadvertent movement during the procedure. Knowledge of complications and risks of procedures. Ability to recognise complications and act appropriately.

Indicators

- Invasive Arterial Pressure Monitoring
- Discuss why arterial monitoring is required.
- Discuss sites of cannulation and the associated risks.
- Demonstrate knowledge of equipment required.
- Prepare and assemble equipment, identify and troubleshoot common problems.
- Demonstrate ability to position patient correctly and support as appropriate throughout procedure.
- Discuss measures to secure cannula and connections.
- Demonstrate ability to remove cannula, apply pressure over puncture site and apply dressing if required.
- Demonstrate knowledge of transducer calibration.
- Discuss arterial waveforms.
- Discuss dangers of intra-arterial injection and safety precautions.
- Discuss management of accidental intra-arterial injection.
- Central Venous Pressure Monitoring
- Discuss central venous pressure and explain the normal values.
- Discuss use of ultrasonic location device for central venous cannulation.
- Demonstrate knowledge of factors which affect CVP.
- Demonstrate knowledge of sites used for central venous cannulation and associated potential complications.
- Demonstrate a knowledge of different central venous cannula.
- Demonstrate correct positioning of patient during central venous cannulation.
- Demonstrate appropriate support of awake patient.
- Identify the features of a normal CVP trace.
- Demonstrate knowledge of transducer calibration.

Method/Evidence

- **DIRECT OBSERVATION** []
- **HAEMODYNAMIC MONITORING WORKBOOK** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Sedation

Many procedures are performed under sedation by a Healthcare Practitioner (HCP) other than an anaesthetist. The responsibility for the conduct of the procedure lies with the registered practitioner.

3.5 Competency Understands the principles and hazards of IV sedation

Knowledge and Skills

Pharmacological basis of sedation.
 Clinical aspects of administering sedation.
 Principles of Conscious Sedation.
 Monitoring for sedated patients.

Indicators

- Administer O₂ therapy if required.
- Discuss basic pharmacology of commonly used sedative agents.
- Discuss principles, uses and advantages of conscious sedation.

Method/Evidence

- DIRECT OBSERVATION []
- DISCUSSION []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

3.6 Competency Can assist in the care of a patient during a procedure under sedation

Knowledge and Skills

Shows the ability to monitor depth of sedation and takes appropriate action on actual or impending over-sedation.
 Can monitor vital signs during sedation and notify the registered practitioner of any adverse trends.

Indicators

- Discuss side affects associated with the use of sedation.
- Discuss sedation scoring tools.
- Attach monitoring devices.
- Discuss reversal agents in relation to sedation.

Method/Evidence

- DIRECT OBSERVATION []
- DISCUSSION []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Regional anaesthetic blocks

However the AA must be able to ensure patient safety and comfort during these procedures and communicate with the registered practitioner. Inadvertent over-sedation may result in loss of airway.

3.7 Competency Knows basic anatomy relevant to spinal, epidural and other regional analgesia

Knowledge and Skills

Relevant anatomy of spinal canal, nerve plexuses, and important individual nerves, including those to the eye, which may be usefully blocked. AA must be able to position patient appropriately, maintain immobility at critical times (see also 3.8), and follow the progress of the block. Knowledge of symptoms and signs of local anaesthetic toxicity.

Indicators

- Discuss the anatomy of the spinal column.
- Compare and contrast spinal and epidural anaesthesia.
- Discuss altered physiology in spinal and epidural anaesthesia.
- Discuss vasopressors in relation to spinal /epidural anaesthesia.
- Discuss contraindications to spinal/epidural anaesthesia.
- Discuss complications of spinal/epidural anaesthesia.
- Demonstrate basic knowledge of nerve pathways commonly blocked during regional anaesthesia.
- Discuss contraindications to peripheral nerve block.
- Discuss complications of peripheral nerve block.
- Discuss basic local anaesthetic pharmacology.
- Demonstrate knowledge of local anaesthetic toxicity.
- Discuss compartment syndrome in relation to regional anaesthesia.

Method/Evidence

- [DISCUSSION \[\]](#)
- [Questions \[\]](#)

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

3.8 Competency Able to assist anaesthetist during establishment of regional anaesthesia

Knowledge and Skills

Preparation of equipment, preparation of nerve stimulator, patient positioning, and communication with the patient at all stages.
 Understands need for routine monitoring, IV access and accessibility of standard resuscitation equipment.
 Recognition of symptoms and signs of local anaesthetic toxicity. (See 3.7)
 Ability to assist in management of patient with symptoms and signs of local anaesthetic toxicity.

Indicators

- Select and assemble appropriate equipment.
- Demonstrate ability to position patient correctly and support throughout procedure.
- Attach monitoring devices.
- Discuss the need for IV access.
- Discuss the features of spinal needles.
- Recognise when cardio/respiratory function has been compromised as a result of regional block.
- Alert anaesthetist to changes in patient’s vital signs.
- Discuss the stages involved in each type of block and ensure patient remains immobile at crucial points of the procedure.
- Able to locate 20% lipid emulsion for lipid rescue.

Method/Evidence

- Questions []
- DISCUSSION []
- DIRECT OBSERVATION []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

3.9 Competency Understands principles of assessment of extent of regional anaesthetic block

Knowledge and Skills

Knowledge of dermatomes. Testing using cold / pinprick. Should be able to assess extent of a block where this might be the cause of compromised respiratory function.
 Should be able to measure the degree of block where this may compromise tissue viability or herald signs of cord compression.

Indicators

- Discuss dermatomes.
- Discuss techniques to determine extent of regional block.

Method/Evidence

- Questions []
- DISCUSSION []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Section 4 *Involvement in Airway Management*

General

Securing the airway is an important and occasionally very difficult part of the anaesthetist's work. The AA plays an important complementary role in this.

4.1 Competency Recognises the role of the Anaesthetic Assistant in airway establishment

Knowledge and Skills

The role of the AA in airway establishment

Indicators

- Support and maintain the patient's airway as required.
- Anticipate anaesthetist's requirements and provide suitable airway adjuncts.
- Discuss optimum position for airway management.
- Discuss the placement of a Guedel airway.
- Discuss the placement of a Laryngeal Mask Airway.
- Discuss the placement of a nasopharyngeal airway.
- Discuss the term 'pre-oxygenation'.
- Assist the anaesthetist in securing the airway.

Method/Evidence

- Notes []
- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **BASIC AIRWAY MANAGEMENT WORKBOOK** []
- **BREATHING SYSTEMS WORKBOOK** []

Please use checkboxes to assist with assessment

Evidence items in **BOLD and CAPITALS** are Mandatory
4 of these are **MANDATORY** Evidence items.

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.2 Competency Knows the anatomy of the upper airway

Knowledge and Skills

Those aspects of the anatomy of the upper airway, which are relevant to laryngoscopy, intubation and the placement of LMAs and other airways.

Indicators

- Describe airway anatomy.
- Relate anatomy / physiology and discuss the following:
 - inspired oxygen concentration (FiO₂);
 - pulse oximetry;
 - end tidal CO₂;
 - end tidal anaesthetic agent;
 - tidal volume (ml/kg) and expired minute volume;
 - airway pressure and factors which affect it.
- Discuss the term 'Functional Residual Capacity' and what may affect it.

Method/Evidence

- Questions []
- DISCUSSION []
- DIRECT OBSERVATION []
- VENTILATOR WORKBOOK []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.3 Competency Can clear the airway where upper airway obstruction is present

Knowledge and Skills

Can recognise upper-airway obstruction. Can perform manoeuvres to clear the airway: effective head extension, jaw-thrust, oropharyngeal suction, insert an appropriate size of Guedel airway or nasopharyngeal airway. May have first-line involvement with management of upper airway obstruction in the theatre suite.

Indicators

- Recognise airway obstruction.
- Demonstrate sufficient psychomotor skills to maintain patient's airway.
- Demonstrate ability to manage airway obstruction.

Method/Evidence

- Questions []
- DISCUSSION []
- DIRECT OBSERVATION []
- ILS CERTIFICATE []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Airway Equipment

A large number of pieces of equipment have been developed to assist in safely securing the airway. The AA must be familiar with both the common and less common equipment that may be required, and be able to produce that equipment on request. The AA must be familiar with the features, mode of use and hazards associated with these items.

4.4 Competency Can set up for and assist the anaesthetist with routine intubation of the trachea

Knowledge and Skills

Sets up intubation equipment tray / trolley.
 Able to test the equipment.
 Positions the patient appropriately and assists the anaesthetist with routine intubation of the trachea.

Indicators

- Demonstrate ability to prepare and check equipment for routine intubation.
- Demonstrate competency in assisting with the positioning of the patient to maximise patient comfort and provide optimal access for the anaesthetist.
- Provide appropriate support and assistance to the anaesthetist during intubation.

Method/Evidence

- **DIRECT OBSERVATION []**
- Discussion []
- Questions []
- **BASIC AIRWAY MANAGEMENT WORK-BOOK []**
- **BREATHING SYSTEMS WORKBOOK []**

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.5 Competency Understands features of oxygen delivery equipment

Knowledge and Skills

Face masks: types, design features including fixed and variable performance designs.
 Nasal cannulae.
 Wall O₂ flow meters.

Indicators

- Discuss types of oxygen supply.
- Discuss oxygen delivery devices.
- Consistently select appropriate size and type of facemask.
- Select appropriate O₂ mask recognising patient's individual requirements.

Method/Evidence

- **DIRECT OBSERVATION []**
- **DISCUSSION []**
- Questions

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.6 Competency Detailed knowledge of airway equipment, features, role and mode of use

Knowledge and Skills

Straight and curved bladed laryngoscopes; specialised laryngoscopes for difficult intubation (McCoy / Bullard or similar); forceps; bougies and introducers; ET Tubes, including DLT / RAE / Microlaryngeal (See 4.7); intubating LMA; jet insufflation equipment; fibre optic intubating equipment.

Indicators

- Discuss types of laryngoscopes.
- Discuss adjuncts used in intubation.
- Discuss types of endotracheal tube.
- Discuss the use of non-cuffed endotracheal tubes in children (where applicable).
- Discuss types of LMA.
- Discuss other locally available airway devices.
- Discuss jet insufflation / ventilation.
- Demonstrate competency in identification, assembly, decontamination, terminal disinfection / disposal and use of anaesthetic sundries.

Method/Evidence

- **DISCUSSION** []
- **BASIC AIRWAY MANAGEMENT WORKBOOK** []
- **BREATHING SYSTEMS WORKBOOK** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.7 Competency Can calculate endotracheal tube sizes and lengths

Knowledge and Skills

Calculates endotracheal tube sizes and lengths using standard formulae. Morbidity associated with use of a wrongly sized ET tube.

Indicators

- Discuss the importance of endotracheal tube size and length.
- Demonstrate ability to correctly calculate endotracheal tube length and size.
- Demonstrate ability to prepare tube.
- Discuss complications due to wrongly sized endotracheal tube.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.8 Competency Can describe features of self-inflating bags and can set up and use

Knowledge and Skills

Ambu valves, self-inflating bags.
Key part of emergency management within theatre suite / recovery area, and during intra-hospital patient transfer.

Indicators

- Demonstrate features of self-inflating bags and pre-use checks.
- Discuss the use of self-inflating bags.
- Identify non-disposable / single use self-inflating bags and valves.
- Discuss the requirement for and location of self-inflating bags in the operating department and during intra / inter hospital transfer.
- Demonstrate competency in identification, assembly, decontamination, terminal disinfection / disposal and use of valves and self-inflating bags.

Method/Evidence

- Notes []
- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- Questions []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.9 Competency Can set up a difficult intubation trolley

Knowledge and Skills

Can list the important equipment required for a difficult intubation trolley.
Is able to prepare the equipment for use.

Indicators

- Discuss the requirement for a difficult intubation trolley.
- Identify location and contents of difficult intubation trolley.
- Discuss the preparation and use of each piece of equipment in the difficult intubation trolley.
- Demonstrate competency in identification, assembly, decontamination, terminal disinfection / disposal and use of all items on the difficult intubation trolley.

Method/Evidence

- Notes []
- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- Questions []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.10 Competency Knows protocol for unexpected difficult intubation and failed intubation drill

Knowledge and Skills

Management of expected and unexpected difficult intubation. Detailed failed intubation protocols including Difficult Airway Society guidelines (July 2004).

Indicators

- Prepare anaesthetic room and equipment for patient with known difficult airway.
- Discuss protocol for failed intubation.
- Demonstrate ability to assist in the management of failed intubation.
- Use nationally produced guidelines to inform practice

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **ANNOTATED DAS GUIDELINES** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Assist During the Securing of the Airway

Two-person bag-mask ventilation and cricoid pressure are important interventions in which the AA must be competent. The AA must be practised and skilled at assisting the anaesthetists throughout the period before the airway is secured. Awake fibre optic intubation or emergency cricothyroidotomy may have to be performed at any time as the safest way to secure the airway.

4.11 Competency Participates in Rapid Sequence Induction, including effective cricoid pressure

Knowledge and Skills

Sets up equipment, prepares environment and patient for Rapid Sequence Induction.
 Identifies cricoid cartilage.
 Applies appropriate pressure at the appropriate time.
 Is able to implement the safe procedure for its release.
 Minimises risk of acid aspiration.

Indicators

- Discuss rapid sequence induction.
- Describe the process of rapid sequence induction.
- Check trolley tips and is correctly orientated.
- When practicable ensure the use of two AAs.
- Identify cricoid cartilage in a broad selection of patients.
- Demonstrate correct application of cricoid pressure.
- Release cricoid pressure on anaesthetist's instruction. (See also 4.10)
- Release pressure slowly and is prepared to re-apply if required.
- Secure endotracheal tube.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.12 Competency Demonstrates ability to perform either role in two-person bag-mask ventilation

Knowledge and Skills

Can hold a facemask in position, ensuring a gas-tight seal; or perform manual IPPV. Can identify suitable breathing systems.

Indicators

- Identify suitable facemask type and size. (See also 4.3)
- Select correct type of breathing system.
- Ensure breathing system is set for manual / spontaneous ventilation.
- Demonstrate ability to ventilate patient.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.13 Competency Can set up and assist with local anaesthesia for, and subsequent performance of, awake fibre optic intubation

Knowledge and Skills

Can assemble equipment required for awake fibreoptic intubation and assist with all aspects of this.

Indicators

- Discuss the indications for fibreoptic intubation. (See also 1.3)
- Describe the process of and assist during awake fibre optic intubation.
- Discuss drugs used.
- Discuss anaesthetic equipment used during awake intubation.
- When practicable ensure the use of two AAs.
- Discuss extubation for this patient group. (See also 9.8)
- Demonstrate competency in identification, assembly, leak tests and decontamination of Fibre optic scope.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.14 Competency Can assist with inhalation induction

Knowledge and Skills

Can communicate effectively with the patient. Anticipate and manage inadvertent patient movement during induction. Inhalation induction of anaesthesia may have to be performed at any time (including periods with out of hours levels of support) as the safest way to achieve anaesthesia.

Indicators

- Discuss indications for inhalation induction. (See also 3.1)
- Discuss Guedel’s classical signs of anaesthesia.
- Is prepared for and ensures patient safety throughout stages of anaesthesia.
- Ensures a quiet, calm environment.
- Discuss patient position during inhalation induction.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.15 Competency Demonstrates ability to place a laryngeal mask in an adult patient

Knowledge and Skills

Can place a laryngeal mask airway (LMA) in an adult patient (to ILS course standard).
The AA may be asked, during emergency management, to site an LMA – and should be practised in this.

Indicators

- Complete ILS course / **equivalent** local training course.

Method/Evidence

- **ILS CERTIFICATE []**

This is a Mandatory requirement to PASS this Module

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.16 Competency Can assist during cricothyroidotomy

Knowledge and Skills

Can identify and set up the equipment required for a cricothyroidotomy, and knows how to assist the anaesthetist during this procedure.
Can rapidly connect this to an appropriate oxygen supply.

Indicators

- Discuss indication for cricothyroidotomy.
- Discuss techniques and devices.
- Discuss optimal patient position.
- Demonstrate how to locate equipment.
- Demonstrate how to assemble equipment and connect to appropriate breathing system.
- Discuss patient management options. (See also 4.10, 10.1)

Method/Evidence

- **DIRECT OBSERVATION []**
- **DISCUSSION []**
- **Questions []**


 Where it is not possible to view a cricothyroidotomy during the module - **SIMULATION/Questioning** should be deployed as the assessment method

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

4.17 Competency Can assist in management of patient with unstable cervical spine

Knowledge and Skills

Can position appropriately the patient with an unstable cervical spine and assist the anaesthetist in management of the patient and the airway.

Indicators

- Discuss how the head is positioned and supported to prevent damage to the cervical spine.
- Demonstrate ability to provide manual in line stabilisation.
- Discuss methods of neck stabilisation.
- Discuss management of patient with neck brace/collar.
- Discuss the use of anaesthetic adjuncts in the event of difficult airway. (See also 4.10)

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []


 Where it is not possible to view an unstable C-spine during the module - **SIMULATION/Questioning** should be deployed as the assessment method

Mid-term | Full-term
SSA | MA | SSA | MA

.....**Mentor/Assessor Signature**

Section 5 Care of Anaesthetic Machine, Monitoring and Related Equipment

Anaesthetic machine (including all anaesthetic delivery systems)

The AA has a major role to play in systematically preparing and checking the anaesthetic machine. This important piece of equipment is central to the administration of general anaesthesia, and the AA must be able to assist the anaesthetist in solving problems. Patient safety depends on a correctly set-up anaesthetic machine.

5.1 Competency Able to set up an anaesthetic machine, check it, pass it as safe to use and record this information

Knowledge and Skills

Demonstrates ability to set up an anaesthetic machine, check it to Association of Anaesthetist's Guidelines (Current January 2004); and to the Manufacturer's Guidelines (including between-case checks).
Demonstrates awareness of importance of vaporiser seating and suction.

Indicators

- Check an anaesthetic machine in accordance with the current Association of Anaesthetists Guidelines
- Describe the purpose and function of the following items:
 - Pin Index Safety System;
 - Bodok seals;
 - blanking plugs;
 - anti-hypoxic link.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **COMPLETION CERTIFICATE FOR MHRA E-LEARNING MODULE** []

Please use checkboxes to assist with assessment

Evidence items in **BOLD and CAPITALS** are Mandatory
ALL of these are **MANDATORY** Evidence items.

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

5.2 Competency Knows the safety features of the anaesthetic machine

Knowledge and Skills

Can demonstrate the safety features of the anaesthetic machine: including gas specific components, oxygen failure alarms, backup gas supplies, emergency oxygen flush, blow-off pressure valves, scavenging, anti-hypoxic mixture features.

Indicators

- Discuss the purpose of the safety features of an anaesthetic machine:
 - volatile agent and gas monitoring devices;
 - anti-hypoxic features;
 - oxygen failure alarm;
 - gas supply back up;
 - emergency oxygen flush;
 - blow-off pressure valve function;
 - waste gas-scavenging functioning.

Method/Evidence

- Notes []
- **DISCUSSION** []
- Questions []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

5.3 Competency Can identify common breathing systems, state the Mapleson classification and their functional characteristics,

Knowledge and Skills

Mapleson functional classification of breathing systems.
Circle system set-up and features.
Checking system patency and integrity.

Indicators

- Describe the Mapleson classification of systems A – F and their clinical application.
- Demonstrate the ability to perform patency and safety checks on breathing systems.
- Discuss features of a circle system.
- Demonstrate ability to set up a circle system.
- Discuss the role of CO₂ absorption agents.
- Demonstrate ability to safely change and refill CO₂ absorption canister.

Method/Evidence

- Notes []
- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- Questions []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

5.4 Competency Understands purpose and features of Anaesthetic Machine Ventilator

Knowledge and Skills

Purpose and detailed function of ventilators.
Clinical aspects of the use of these.

Indicators

- Demonstrate ability to check machine-integrated and stand-alone ventilators.
- Discuss features and function of ventilators and relate these to patient safety.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

5.5 Competency Can identify gas cylinders. Knows how to safely handle and store gas cylinders

Knowledge and Skills

International colour scheme for gas cylinders.
Safe storage and handling of gas cylinders.
Basic HSE guidelines.

Indicators

- Discuss correct procedures in the storage and handling of gas cylinders.
- Demonstrate safe removal and replacement of cylinders on the anaesthetic machine.
- Locate Safety Data Sheets for cylinders within the department.
- Discuss Health and Safety Executive (HSE, 1999) guidelines regarding the use, storage and handling of medical gas cylinders
- Discuss the international colour scheme for gas cylinders.
- Identify cylinder sizes and connectors.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

5.6 Competency Can safely connect and disconnect gas supplies. Can operate emergency shut-off valves

Knowledge and Skills

Able to attach and detach connectors. Aware of site of emergency shut-off valves, the circumstances when these may need to be used, and who to inform.

Indicators

- Demonstrate ability to safely connect / disconnect anaesthetic machine connectors.
- Perform a 'tug test' (see 5.1) to ensure safe connection.
- Discuss colour-codes for piped gases and vacuum.
- Identify location of emergency gas/vacuum shut off valve.
- Discuss the circumstances where the shut off valve would be used.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **COMPLETION CERTIFICATE FOR MHRA E-LEARNING MODULE** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

5.7 Competency Can identify and correct anaesthetic machine problems which may occur during use

Knowledge and Skills

Can identify and correct where possible, breathing system leaks; high pressure within patient circuit; vaporizer malfunction; failure of gas supply; electrical power failure; suction failure; CO₂ absorption failure.

Indicators

- Troubleshoot and correct the following:
 - breathing system leak;
 - breathing system failure;
 - high pressure in breathing system;
 - vaporizer malfunction;
 - gas supply failure;
 - power failure;
 - CO₂ absorption failure;
 - suction failure.
- Seek advice from members of the multidisciplinary team.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Monitoring

The AA needs to be able to understand and monitor values in the context of chart trends. The AA should be able to chart physiological data if required.

5.8 Competency Demonstrates ability to correctly establish routine monitoring

Knowledge and Skills

Able to establish routine monitoring SpO2; ECG; NIBP; Capnography. Nasopharyngeal temperature probe and urimeter as appropriate.

Indicators

- Discuss the clinical significance of routine monitoring.
- Discuss anatomy and physiology relevant to routine monitoring.
- Attaches patient correctly to routine monitoring.

Method/Evidence

- **DIRECT OBSERVATION []**
- **DISCUSSION []**
- **Questions []**

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

5.9 Competency Able to understand anaesthetic charts and trends, perform charting of physiological data

Knowledge and Skills

Ability to chart monitoring values using standard symbols. Can recognise adverse trends, which indicate risk. Can identify common artefacts. Can describe monitoring details to the anaesthetist. Alerting staff to adverse monitoring trends may prevent the development of life-threatening emergencies.

Indicators

- Demonstrate ability to chart accurately using standard symbols.
- Discuss and interpret monitoring trends.
- Identify common artefacts and discuss their cause.
- Report monitoring information accurately to the anaesthetist.

Method/Evidence

- **DIRECT OBSERVATION []**
- **DISCUSSION []**
- **INTERPRETATION ANAESTHETIC CHART DATA []**
- **Questions []**

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

5.10 Competency Can describe principles of monitoring depth of anaesthesia, including clinical aspects of prevention of awareness

Knowledge and Skills

Clinical depth of anaesthesia monitoring principles.
Risk of awareness.
Responds appropriately to clinical signs of light anaesthesia.

Indicators

- Recognise signs of light anaesthesia.
- Discuss anaesthetic awareness.
- Discuss the principles of the nerve stimulator in ensuring muscle relaxation.
- Discuss the principles of monitoring neuromuscular blockade.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

5.11 Competency Can describe principles of calculating intra-operative blood loss

Knowledge and Skills

Intra-operative blood loss calculation including worked examples.

Indicators

- Demonstrate ability to calculate, record and maintain a running total of blood loss.
- Discuss normal circulating blood volume in adult and paediatric patients.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Electrical Equipment

The AA sets up and manages electrical equipment in the theatre, and must understand the dangers involved and how to avoid patient and staff harm.

5.12 Competency Knowledge of electrical safety

Knowledge and Skills

Electrical safety: including mains power, earthing, applied parts, micro-shock. (See also 6.13)

Indicators

- Discuss workplace precautions to reduce the risk of injury to patients and staff.
- Discuss safe principles of diathermy.
- Select appropriate site and connect diathermy electrode.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

5.13 Competency Can describe and implement safety measures required during surgical use of lasers or X-ray equipment

Knowledge and Skills

Knows safety measures required during surgical use of lasers or X-ray equipment.

Indicators

- Discuss safety policies and procedures relating to use of X-ray / laser equipment for patients and staff.

Method/Evidence

- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Section 6 Care of Equipment Relevant to Anaesthesia

This section should be read in conjunction with the sections on airway management (Section 4) the anaesthetic machine (Competency 5.1– 5.8) and intra-operative patient care (Section 7).

General Care of Equipment

The anaesthetist and the AA have at their disposal a wide range of equipment. They must know in detail how to use it effectively and safely. The AA has a role in factors affecting a team’s ability

6.1 Competency Knows how to manage the systematic introduction and care of new anaesthetic equipment

Knowledge and Skills

A strategy for introducing new equipment: including features, pitfalls, clinical relevance, set-up, checks, documentation, dissemination of clinical warnings, manuals (storage availability and updates).

Indicators

- Discuss the procedure within the operating department for the introduction of new equipment.
- Discuss the importance of ensuring new equipment has been checked and registered on asset register by medical physicians before clinical use.
- Discuss the importance of checking that any ‘on loan/ trial’ equipment has been checked by medical physics and indemnity form obtained from manufacturer before clinical use.
- Discuss the importance of servicing / maintenance of equipment.
- Demonstrate familiarity with checking and set up of any new equipment.
- Facilitate the dissemination of new equipment manuals and any relevant clinical warnings / information.
- Facilitate training for staff in the safe and effective use of new equipment.
- Discuss: www.aagbi.org/sites/default/files/safe_management_2009_0.pdf

Method/Evidence

- Notes []
- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **COMPLETION CERTIFICATE FOR MHRA E-LEARNING MODULE** []

Please use checkboxes to assist with assessment

Evidence items in **BOLD and CAPITALS** are Mandatory
3 of these are **MANDATORY**
Evidence items.

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

6.2 Competency Can implement standard precautions for infection control during the handling of anaesthesia equipment

Knowledge and Skills

Shows ability to manage equipment in a way that does not pose an infection risk to either patient or staff. Understands importance of traceability of instruments.

Indicators

- Demonstrate knowledge of the Scottish Executive Health Department’s report and guidance on Decontamination of Surgical Instruments and Other Medical Devices (2001)
- Discuss and demonstrates an understanding of tracking and traceability.
- Discuss the additional precautions required in relation to variant Creutzfelds-Jacob Disease (vCJD).

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

6.3 Competency Understands factors to be considered when arranging routine maintenance of equipment

Knowledge and Skills

Factors involved in equipment maintenance: including impact on services, backup equipment. Liaison with Medical Physics.

Indicators

- Demonstrate ability to ensure routine maintenance of equipment is carried out.
- Discuss local policy, manufacturer’s guidelines and Medicines & Healthcare Regulatory Authority (MHRA) input with regard to equipment maintenance. (See also 6.1)
- Discuss the impact that poor maintenance of equipment can have on service delivery.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

6.4 Competency Can identify and manage faulty or broken equipment

Knowledge and Skills

Demonstrates ability to identify faulty or unsafe equipment, to remedy this where possible, and to report the fault appropriately.
 Knows local policy regarding equipment requiring cleaning before reuse.
 Liaison with Medical Physics.

Indicators

- Demonstrate ability to identify faulty or unsafe equipment.
- Discuss importance of removing and replacing unsafe equipment.
- Adhere to local policy for reporting and documenting faulty equipment.
- Ensure equipment is decontaminated before being sent for or returning from repair.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Intravenous equipment

6.5 Competency Knows features and management of syringes, needles and other sharps

Knowledge and Skills

Demonstrates knowledge of the features of; safe handling of; disposal of; and clinically relevant problems associated with the following equipment: syringes, needles, sharps. Local needlestick management protocol.

Indicators

- Adhere to local policy for the use and disposal of sharps.
- Discuss the role of Occupational Health in needle stick injury.
- Ensure only appropriate items are disposed of in sharps bin.
- Discuss local policy for the disposal of sharps bin.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **ANNOTATED Policy** []
- **Questions** []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

6.6 Competency Can set up IV infusion equipment

Knowledge and Skills

Able to set up IV infusions, including fluid warming devices and pressure bags.
Volumetric pumps.

Indicators

- Discuss available IV infusion equipment.
- Correctly identify appropriate giving set.
- Discuss the use of fluid warming devices.
- Prepare fluid warming device.
- Use pressure infuser as appropriate.
- Ensure infusion device has adequate battery power or is connected to a mains power supply.

Method/Evidence

- DISCUSSION []
- DIRECT OBSERVATION []
- Questions []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

6.7 Competency Knowledge of the equipment associated with blood and blood product transfusion

Knowledge and Skills

Specific requirements relating to blood transfusion products. Platelet filters and platelet giving sets. Local protocols concerning the safe administration of blood products. (See 8.5) Current national BTS guidelines. Aware of purpose of cell-salvage equipment. Can use equipment for haemoglobin estimation from a capillary blood sample.

Indicators

- Select and prepare correct giving set appropriate to blood product being utilised.
- Discuss the use of equipment for cell salvage.
- Use equipment (where available) for haemoglobin estimation.
- Calibrate (where available) equipment for haemoglobin estimation in accordance with manufacturer’s guidelines.

Method/Evidence

- DIRECT OBSERVATION []
- DISCUSSION []
- Questions []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

6.8 Competency Can set up a pressure transducer

Knowledge and Skills

Able to set up, attach, and zero pressure transducers.

Indicators

- Select appropriate equipment and set up a pressure transducer.
- Demonstrate ability to reconfigure monitoring equipment to display numerical and/or waveform information.
- Demonstrate ability to correctly zero pressure transducers.
- Discuss the importance of regular pressure bag checks.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

6.9 Competency Can describe the principles associated with train-of-four NMJ assessment

Knowledge and Skills

Basic NMJ physiology, facilitation, fade.
Clinical aspects of train-of-four measurement.
Surface anatomy of ulnar, common peroneal, facial, radial and tibial nerves.

Indicators

- Discuss the physiology of neuromuscular junctions.
- Discuss the clinical aspects of the train-of-four measurement and interpretation.
- Understand the principles and significance of train-of-four assessment during the reversal of anaesthesia.
- Identify and describe anatomy of commonly used sites for train-of-four assessment.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

6.10 Competency Is able to set and apply a train-of-four stimulator

Knowledge and Skills

Identifies appropriate site, attaches train-of-four stimulator.

Indicators

- Demonstrate ability to apply nerve stimulator electrodes.

Method/Evidence

- **DIRECT OBSERVATION** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

6.11 Competency Knows principles of nerve stimulation during local anaesthesia

Knowledge and Skills

Nerve stimulators for locating nerves, insulated needles, principles of their use.
Is able to assist the anaesthetist when this equipment is being used.

Indicators

- Discuss the use of a nerve stimulator to locate nerves. (See also 3.7, 3.8, 3.9)
- Discuss available types of regional block needle.
- Discuss the importance of using the correct nerve stimulator.
- Demonstrate ability to correctly set the nerve stimulator with direction from anaesthetist.
- Discuss the need for patient cooperation.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

6.12 Competency Can measure blood glucose and describe risks associated with abnormal values

Knowledge and Skills

Demonstrates ability to measure blood glucose and describe risks associated with abnormal values.
 Understands particular risks in paediatric patients.
 Can calibrate a blood glucose machine (using manufacturer’s guidelines).

Indicators

- Demonstrate ability to correctly calibrate the blood glucose machine.
- Demonstrate ability to obtain a blood sample for testing.
- Interpret and discuss normal range of blood sugar levels.
- Discuss the significance of abnormal blood sugar levels, particularly in children.
- Discuss management of abnormal glucose levels.

Method/Evidence

- **DIRECT OBSERVATION** []
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Equipment Associated with Surgery

6.13 Competency Can safely apply a diathermy electrode and remove it when no longer required

Knowledge and Skills

Safe choice of site, skin inspection and preparation, application of pad, cable siting and final check.
 Removal and inspection.
 Understands basic principles of electrocautery.

Indicators

- Discuss principles of electrocautery/diathermy.
- Demonstrate ability to select appropriate site for placement of diathermy electrode.
- Check skin to ensure satisfactory condition prior to electrode placement.
- Correctly site cable and connection to diathermy machine.
- Safely remove diathermy electrode following surgery.
- Check and document skin integrity for any signs of damage.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

6.14 Competency Can describe anaesthetic aspects of pacemakers and implantable cardiac defibrillators (ICDs)

Knowledge and Skills

Anaesthetic aspects of pacemakers.
Management of patients with pacemakers and ICDs.

Indicators

- Discuss the use of pacemakers and implantable defibrillators.
- Discuss the effects diathermy may have on a pacemaker.
- Discuss the placement of diathermy electrode with regard to pacemaker or ICD.
- Recognise that patients with a demand type pacemaker or defibrillators may require reprogramming prior to surgery.

Method/Evidence

- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

6.15 Competency Can assist with the positioning of nasogastric tubes

Knowledge and Skills

Shows ability to assist with the positioning of nasogastric tubes in conscious or unconscious patients.

Indicators

- Discuss the use of gastric tubes.
- Select and prepare an appropriate gastric tube.
- Secure tube in position.
- Attach suitable collection bag.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

6.16 Competency Can prepare, apply and monitor the use of arterial tourniquet equipment

Knowledge and Skills

Able to safely prepare, apply, and monitor the use of arterial tourniquet equipment (including exsanguinators). Notifies surgical operator of tourniquet time.

Indicators

- Select and apply appropriate cuff.
- Use exsanguinator as required.
- Select appropriate pressure for limb.
- Monitor tourniquet pressure.
- Record tourniquet start and finish time.
- Discuss the importance of time limitation.
- Regularly update team regarding tourniquet time.
- Discuss the implications of tourniquet pain in the anaesthetised patient.
- Discuss complications of tourniquets.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Section 7 Participation in Intra-operative Patient Care (Including Transfer and Positioning)

7.1 Competency Knows principles of, and participates in, maintaining normothermia in an intra-operative patient

Knowledge and Skills

Patients at risk of hypothermia.
Principles of heat loss in intra-operative patient.
Strategies for maintaining normothermia.
Implementation of these strategies.
Prevention of inadvertent hypothermia.

Indicators

- Discuss physiology and physical principles of thermoregulation.
- Discuss thermoregulation in relation to anaesthesia and surgery.
- Discuss patient groups at risk of hypothermia.
- Use strategies to maintain normothermia.
- Discuss temperature monitoring.
- Discuss risks and contraindications of patient warming devices.
- Discuss the significance of normothermia to postoperative recovery.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

7.2 Competency Understands principles of, and participates in, maintaining fluid balance in an intra-operative patient

Knowledge and Skills

The principles of maintaining fluid balance in intra-operative patient.
Demonstrates ability to accurately record fluid balance, recording of fluid losses and administration of IV and other fluids. (See 5.11)

Indicators

- Discuss the physiology relevant to fluid balance.
- Discuss the clinical importance of maintaining fluid balance.
- Record urine output.
- Record administration of IV fluids.

Method/Evidence

- **Notes** []
- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **INTERPRETATION OF ANAESTHETIC CHART** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

7.3 Competency Can use the operating table and its attachments

Knowledge and Skills

Understands the features of the operating table and its attachments, and has the ability to use them correctly and safely.

Indicators

- Discuss safety features of the operating table.
- Demonstrate ability to safely move the operating table.
- Identify and use appropriate operating table attachments.
- Return the operating table to a head down or level position in the event of an anaesthetic emergency.

Method/Evidence

- DISCUSSION []
- DIRECT OBSERVATION []
- MOVING & HANDLING CERT. []
- Questions []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

7.4 Competency Knows anatomy relevant to, and shares knowledge of, the risks of patient positioning

Knowledge and Skills

Anatomy relevant to patient positioning.
The risks of patient positioning (including eye protection, nerve protection and cardio-respiratory consequences of patient position, prolonged anaesthesia).

Indicators

- Discuss the management and risks of patient positioning.
- Discuss risk assessment strategies for individual patient positioning:
 - Supine
 - Lateral
 - Lithotomy
 - Lloyd Davis
 - Prone

Method/Evidence

- DISCUSSION []
- MOVING & HANDLING CERT. []
- Questions []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

7.5 Competency Can position patients safely for surgery, including transfer to the operating table using appropriate equipment

Knowledge and Skills

Able to position patients safely in a wide range of positions. Satisfies requirements of moving and handling training (including regular updates).

Indicators

- Demonstrate ability to place the patient in a **wide range** of surgical positions:
 - Supine
 - Lateral
 - Lithotomy
 - Lloyd Davis
 - Prone
- Demonstrate ability to use patient transfer equipment safely and appropriately.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **MOVING & HANDLING CERT.** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

7.6 Competency As part of the perioperative team, can safely return patient to supine or lateral decubitus position

Knowledge and Skills

As part of the perioperative team is able to safely return patient to supine or lateral decubitus position.

Indicators

- Demonstrate ability to safely position the patient following surgery.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **MOVING & HANDLING CERT.** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Deep Venous Thrombosis Risk / Pressure Area Care

The AA has a role to play in pressure area care, should know a risk scoring system and should be able to demonstrate ability to reduce the risk.

7.7 Competency Understands the risks of deep venous thrombosis, the principles of prophylaxis and the equipment involved

Knowledge and Skills

The risks of deep venous thrombosis, the principles of deep venous thrombus prophylaxis, assessment of risk for each patient and implementation of strategies to reduce that risk including equipment, which may be involved. The risks of compartment syndrome. Prolonged anaesthesia.

Indicators

- Discuss the physiological process in the formation of a deep vein thrombus (DVT).
- Discuss factors which pre dispose patients to DVT.
- Discuss assessment strategies for DVT risk.
- Discuss the implementation of strategies to reduce the risk of DVT.
- Demonstrate use of equipment for the prevention of DVT.
- Discuss national and local guidelines for prevention of DVT.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

7.8 Competency Able to quantify tissue viability and can implement appropriate strategies to reduce risk

Knowledge and Skills

Assesses tissue viability using a current scoring system. Describes, and implements strategies to reduce that risk. Under stands the hospital team’s role in reducing the incidence of post-operative pressure sores in an increasingly elderly population. Increased risks with prolonged anaesthesia.

Indicators

- Discuss risk factors associated with tissue viability.
- Demonstrate ability to use a tissue viability scoring system.
- Demonstrate ability to implement strategies to protect tissue viability.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **TISSUE VIABILITY SCORING SYSTEM ASSESSMENT (for simulated patient)**
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Section 8 Involvement with routine drugs / fluid therapy

8.1 Competency Adheres to approved policies for the secure storage and management of medicines, including controlled drugs

Knowledge and Skills

Classes of drugs. Policies for the secure storage and management of medicines. Legal and practical issues relating to the management of Controlled Drugs. The AA's role includes providing drugs to the anaesthetist without any undue delay, from a registered 'key holder' if required.

Indicators

- Discuss the legal definition of drug classifications.
- Discuss national and local regulations regarding storage and management of medicines.
- Discuss national and local regulations regarding controlled drugs
- Discuss the recording of controlled drugs as per local hospital policy.
- Discuss the importance of having drugs immediately available.
- Provide drugs to the anaesthetist without undue delay.

Method/Evidence

- Notes []
- DISCUSSION []
- DIRECT OBSERVATION []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

8.2 Competency Understands principles of rotating drug stock to minimise waste

Knowledge and Skills

Drug stock management.

Indicators

- Discuss the importance of drug stock rotation.
- Adhere to local guidelines for drug storage.
- Discuss the implications of poor drug stock control.
- Demonstrate ability to order drugs.
- Demonstrate ability to receive, record and correctly store drugs.

Method/Evidence

- Notes []
- DISCUSSION []
- DIRECT OBSERVATION []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

8.3 Competency Knows the hazards of anaesthetic agent pollution

Knowledge and Skills

The hazards of anaesthetic agent pollution and importance of scavenging.
 Routine monitoring of background levels of anaesthetic agents.
 Appropriate action in the event of a spillage. (See also 5.1, 5.2 and 5.7)

Indicators

- Discuss the risks of exposure to anaesthetic agents.
- Discuss gas scavenging systems.
- Discuss routine monitoring of anaesthetic agent pollution.
- Discuss local guidelines in the event of anaesthetic agent spillage, and know location of relevant spill kit equipment.

Method/Evidence

- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

8.4 Competency Understands the clinical difference between crystalloids and colloids

Knowledge and Skills

Pathophysiology of body fluid compartments.
 Principles of fluid therapy.

Indicators

- Discuss the pathophysiology of body fluid compartments.
- Discuss practical examples of fluid therapy.
- Discuss differences between crystalloids, colloids and the indications for use.

Method/Evidence

- **DISCUSSION** []
- **FLUID MANAGEMENT WORKBOOK** []
- **Questions** []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

8.5 Competency Understands the principles involved in the safe administration of blood and blood products to adult and paediatric patients

Knowledge and Skills

Blood and blood products: clinical aspects of therapy, checks, recognition and management of transfusion reactions and clear documentation. Equipment for administration of blood products to paediatric patients. (See 6.7)

Indicators

- Complete education pack for 'Better Blood Transfusion'
- Demonstrate ability to check blood transfusion products in accordance with BTS and local policy.
- Follow documentation guidelines for blood product administration.
- Discuss blood transfusion thresholds.
- Discuss the importance of close patient monitoring to identify any blood product incompatibility at an early stage.
- Can identify signs of transfusion reaction.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []
- **BETTER BLOOD TRANSFUSION CERT.**[]


 Where LOCAL HOSPITAL BLOOD TRANSFUSION POLICY training is undertaken **and certificated** then this may be used instead

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

General Management of Drugs

8.6 Competency Can maintain clear, accurate and complete records of drug use

Knowledge and Skills

Able to maintain clear, accurate and complete records of drug use.

Indicators

- Discuss guidelines for written records relating to the use of drugs.
- Use NMC / HCPC guidelines for drug recording.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

8.7 Competency Can calculate dosages and concentrations appropriate for clinical use

Knowledge and Skills

Able to calculate dosages and concentrations appropriate for clinical use (as per local policy).
The AA may usefully prepare drugs for administration during emergencies, and must be familiar with safe practice.

Indicators

- Demonstrate ability to calculate doses and prepare drugs following guidelines.
- Complete local Intravenous Drug administration study day and supervised practice.
- Use NMC / HCPC guidelines for drug preparation.

Method/Evidence

- DISCUSSION []
- DIRECT OBSERVATION []
- Questions []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

8.8 Competency Understands basic pharmacological principles

Knowledge and Skills

Basic pharmacology, including drug interactions and side effects.
The AA must have a working understanding of the pharmacology of anaesthetic drugs.

Indicators

- Discuss basic pharmacology of drugs used in anaesthesia.

Method/Evidence

- DISCUSSION []
- Questions []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

8.9 Competency Understands the clinical indications, storage requirements, clinical preparation, labelling and disposal requirements of drugs relevant to anaesthetic practice

Knowledge and Skills

The clinical indications, storage requirements, clinical preparation, labelling and disposal requirements of current drugs in the following categories:
 volatile agents; anaesthetic gases; intravenous induction agents; opioids; sedatives; suxamethonium; non-depolarising neuromuscular junction blockers; neuromuscular junction reversal agents; inotropes; pressor agents; vasodilators; anti-arrhythmics; anti-cholinergics; local anaesthetic agents; non-steroidal analgesics; anti-emetic agents; antacids; bronchodilators; respiratory stimulants; steroids; antibiotics; anticoagulants and dantrolene.

Indicators

- Discuss local guidelines on the disposal of drugs.
- Demonstrates ability to safely dispose of unused drugs.
- Discuss classification and modes of use of the following drug groups:
 - volatile agents
 - anaesthetic gases;
 - intravenous induction agents
 - Opioids
 - Sedatives
 - Suxamethonium
 - non-depolarising neuromuscular junction blockers
 - neuromuscular junction reversal agents
 - Inotropes
 - pressor agents
 - Vasodilators
 - anti-arrhythmics
 - anti-cholinergics
 - local anaesthetic agents
 - non-steroidal analgesics
 - anti-emetic agents
 - Antacids
 - Bronchodilators
 - respiratory stimulants
 - Steroids
 - Antibiotics
 - Anticoagulants
 - dantrolene.
- Discuss national and local recommendations for drug / syringe labelling.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **ANAESTHETIC DRUGS WORKBOOK** []
- **Questions** []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

8.10 Competency Understands the principles of target controlled infusion anaesthesia and sedation

Knowledge and Skills

Principles of target controlled infusional anaesthesia and sedation. Programming is responsibility of anaesthetist.

Indicators

- Discuss the principles of target controlled infusion (TCI) anaesthesia and sedation. (See also 8.9)
- Discuss the advantages and disadvantages of this technique.

Method/Evidence

- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

8.11 Competency Able to set up and manage target controlled infusion equipment

Knowledge and Skills

Able to set up target controlled infusion equipment. Aware of safety features.

Indicators

- Identify and prepare TCI equipment.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

8.12 Competency Understands the principles of patient controlled analgesia (PCA)

Knowledge and Skills

Opioid pharmacology with respect to patient controlled analgesia, monitoring, hazards.

Indicators

- Discuss the pharmacology of drugs used for PCA.
- Discuss monitoring of patients using PCA.
- Discuss NMC / HCPC and National guidelines in maintaining written records relating to PCA.

Method/Evidence

- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

8.13 Competency Can set up patient controlled analgesia equipment

Knowledge and Skills

Able to set up patient controlled analgesia equipment, including documentation. Aware of safety features. Responsibility for setting dosage, infusion rates and lockout period lies with the anaesthetist.

Indicators

- Discuss safety features of PCA equipment.
- Prepare PCA equipment following local guidelines.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

8.14 Competency Can set up equipment to deliver nebulised drugs

Knowledge and Skills

Able to set up equipment to deliver nebulised drugs (e.g. bronchodilators).

Indicators

- Prepare equipment to deliver nebulised drugs.

Method/Evidence

- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

8.15 Competency Can set up equipment for epidural infusion

Knowledge and Skills

Able to set up equipment designed to deliver drugs by epidural infusion. Aware of safety features.

Indicators

- Discuss safety features of equipment for epidural infusion.
- Prepare equipment for epidural infusion.
- Use guidelines for the use of epidural infusion equipment.
- Discuss Association of Anaesthetists Guideline on Best Practice at www.aagbi.org/sites/default/files/epidural_analgesia_2011.pdf

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Section 9 *Involvement in Emergency Management*

Role of AA in emergencies

9.1 Competency Knows how to contact senior anaesthetic staff for assistance

Knowledge and Skills

Aware of the importance of rapidly getting help when required. (10.1)

Indicators

- Discuss how to contact appropriate senior nursing / anaesthetic / medical help.

Method/Evidence

- **DISCUSSION** []

DISCUSSION is a **MANDATORY** Evidence item.

Please use checkboxes to assist with assessment

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Knowledge of Relevant Emergency Conditions

9.2 Competency Understands the principles of managing the shocked patient

Knowledge and Skills

Types of shock, grades of shock, their significance, and the principles of managing them.
Anaphylactic Shock Management guidelines published by the Association of Anaesthetists. (10.2)

Indicators

- Discuss types of shock.
- Recognises the significance and implications of shock.
- Discuss the principles for managing shock.
- Discuss Association of Anaesthetists guidelines for Anaphylaxis.

Method/Evidence

- Notes []
- **DISCUSSION** []
- Questions []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

9.3 Competency Understands management of: cyanosis, stridor / laryngeal spasm, bronchospasm, cardiac dysrhythmias, pneumothorax, masseter muscle spasm

Knowledge and Skills

The significance, possible causes of, and management of: cyanosis; stridor / laryngeal spasm; bronchospasm; cardiac dysrhythmias; pneumothorax; masseter muscle spasm. (10.3)

Indicators

- Discuss causes of cyanosis.
- Discuss causes and management of stridor.
- Discuss causes and management of bronchospasm.
- Discuss causes and management of pneumothorax.
- Discuss causes and management of cardiac dysrhythmias.
- Discuss the significance of masseter muscle spasm.

Method/Evidence

- **DISCUSSION []**
- **ANAESTHETIC ROOM EMERGENCIES WORKBOOK []**

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

9.4 Competency Can implement local protocol for management of sudden life-threatening haemorrhage

Knowledge and Skills

Local protocol for management of sudden life-threatening haemorrhage including use of rapid infusors/warmers where available. (10.4)

Indicators

- Discuss the principles for managing haemorrhage.
- Demonstrate ability to source equipment and drugs to manage haemorrhage. (See also 7.2, 5.11)
- Discuss national / local guidelines for management of haemorrhage.

Method/Evidence

- **DISCUSSION []**
- **DIRECT OBSERVATION []**
- **Questions []**

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

9.5 Competency Can describe detailed management of patient with latex allergy

Knowledge and Skills

Pathophysiology and clinical management of latex allergy.
 Setting up a tray with equipment that is safe for use in patients with latex allergy.
 Local protocols for management of these patients. (10.5)

Indicators

- Discusses pathophysiology of latex allergy.
- Discuss risk factors.
- Discuss management of latex allergy.
- Demonstrate ability to source latex free equipment and drugs required to treat patient.
- Demonstrate ability to implement national / local guidelines for management of latex allergy

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

9.6 Competency Understands Malignant Hyperpyrexia

Knowledge and Skills

The clinical features and principles of patient management in malignant hyperpyrexia.
 Guidelines published by the Association of Anaesthetists.
 Adheres to local protocols.
 Knows location of dantrolene, ice and local policy for obtaining more stocks as needed. (10.6)

Indicators

- Discuss malignant hyperpyrexia (MH).
- Awareness that masseter muscle spasm may be first clinical indication of MH.
- Discuss the management of MH.
- Discuss the complications of MH.
- Discuss national / local guidelines for management of Malignant Hyperpyrexia
- Demonstrate ability to source equipment and drugs.
- Utilise risk management strategies for a known MH patient coming to theatre.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

9.7 Competency Can perform Immediate Life Support

Knowledge and Skills

Can perform Immediate Life Support. Attendance at local course: ILS Resuscitation Council (UK).
 Knows local protocols for access and use of defibrillators and support. (10.7)

Indicators

- Complete ILS/equivalent local training programme and yearly updates.**
- Discuss national guidelines for immediate life support
- Demonstrate ability to perform immediate life support.
- Discuss local guidelines regarding use of defibrillators.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []
- **ILS CERTIFICATE** []



Mid-term | Full-term
 SSA | MA | SSA | MA

.....Mentor/Assessor Signature

9.8 Competency Can set up an underwater drain for the treatment of pneumothorax

Knowledge and Skills

Able to set up an underwater drain (or flutter valve) for the treatment of pneumothorax. (10.8)

Indicators

- Prepare and assemble all equipment required for chest drain insertion and Intra-pleural drainage.

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

9.9 Competency Knows how to recognise a clinical incident or near miss and follow local reporting mechanisms

Knowledge and Skills

Critical incidents: definition, action, worked examples. (10.9)

Indicators

- Discuss definition and provide examples of critical incidents.
- Demonstrate ability to follow local reporting procedures.
- Discuss importance of informing/updating line manager.
- Discuss the role of agencies supplying hazard / incident notifications

Method/Evidence

- **DISCUSSION** []
- **DIRECT OBSERVATION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

9.10 Competency Understands importance of being familiar with specialism specific emergency Conditions and has a systematic approach to this

Knowledge and Skills

A systematic approach to developing a good working understanding of the management of important problems specific to the specialties in which the AA practices (e.g. penetrating eye injury surgery; orthopaedic cement hypotension; TURP syndrome). (10.10)

Indicators

- Discuss the unique challenges that individual surgical specialties can present for anaesthesia.

Method/Evidence

- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

9.11 Competency Can describe the principles of safe transfer of patients for investigations or treatment within the hospital

Knowledge and Skills

The principles of adult patient preparation and stabilisation prior to transfer. (10.11)

Indicators

- Demonstrate the ability to prepare for and transfer an adult patient within the hospital.
- Discuss the importance of airway equipment during transfer.
- Discuss the importance of monitoring equipment during transfer.
- Discuss drugs applicable to transfer.
- Discuss the importance of co-ordination of transfer between portering staff, other department /unit staff, etc.

Method/Evidence

- **DIRECT OBSERVATION/SIMULATION**
- **DISCUSSION** []
- **Questions** []

Mid-term | Full-term
SSA | MA | SSA | MA

.....Mentor/Assessor Signature

Workbooks & Worksheets Record

The following **Workbooks and Worksheets MUST be completed**. **Mentor** signs to indicate he/she has **seen and discussed contents** and deems them to be completed in terms of both depth and accuracy.

	Skills Sections	Reviewed by [Date]	Completed [Date]
Anaesthetic Drugs Workbook	4.1, 4.4, 4.6, 8.9		
Medical Gases Workbook	5.1, 5.5, 5.6, 5.7		
Basic Airway Management Workbook	4.6, 4.4, 5.1, 5.5, 5.6, 5.7		
Pre-Operative Assessment Workbook	1.2, 1.3		
Rapid Sequence Induction Workbook	4.11, 5.8		
Anaesthetic Room Emergency Workbook	9.3		
ECG Workbook	1.6		
Regional Anaesthesia Workbook	3.7, 3.8, 3.9, 6.11		
Law and Ethics Worksheet	2.1, 2.2		
Ventilator Workbook	4.2		
Capnography Workbook	5.8, 5.9, 5.10		
Haemodynamic Monitoring Workbook	3.4		
Fluid Management Workbook	8.4		

Date

.....Mentor/Assessor Signature

Anaesthetic Care Competencies end here