Curriculum for the National Specialist Anaesthesiology Training Programme

COLLEGE OF ANAESTHESIOLOGISTS OF IRELAND







Acknowledgments

The authors of the Curriculum for the National Specialist Anaesthesiology Training Programme (the 'Curriculum') wish to acknowledge predecessors in the College of Anaesthesiologists ('CAI' or 'the College') who have made available iterative drafts of previous editions of the College's curriculum, which have served as an invaluable resource in the preparation of the Curriculum. The robust Membership and Final Fellowship Examination Syllabus of the College was referenced extensively in the writing of the Curriculum. The authors of this document gratefully acknowledge the Royal College of Anaesthetists for generously sharing material from their Certificate of Completion of Training curriculum in Anaesthesiology. An extensive literature review of available curricula from national and international communities was undertaken during the preparation of this document. These include the Australian and New Zealand College of Anaesthetists (ANZCA), Joint Faculty of Intensive Care Medicine of Ireland (JFICMI), European Board of Anaesthesiology - Union of European Medical Specialties (EBA UEMS), Accreditation Council for Graduate Medical Education (ACGME), Royal College of Physicians of Ireland (RCPI) and Royal College of Surgeons of Ireland (RCSI). Certain educational elements of these documents have been utilised or referenced to reflect the practice of Anaesthesiology in Ireland.

The Curriculum is the product of a collaboration between multiple stakeholders, including but not limited to Council Members, Anaesthesiology Department and Academic Chairs, Tutors, Committee of Anaesthesiology Trainees ('CAT'), Faculties, Societies and Consultants with areas of special interest.

Status of Curriculum

This document, which is communicated as an E-document, replaces and supersedes previously published documents relating to the Curriculum and Training Regulations. Information in this document is accurate at date of publication. As the Anaesthesiology profession and healthcare system in Ireland continues to evolve, changes to the document may be required and the College reserves the right to amend or replace the Curriculum at its sole discretion and/or in line with best practice. Interpretation of any aspect of the document and subsequent changes will be determined by the College through its Training and Education Committee and Council.

By accepting a place on the National Specialist Anaesthesiology Training Programme (the 'Programme'), a trainee is agreeing to be bound by the rules and regulations outlined in this document, the provisions of the Training Agreement and any subsequent changes. Irrespective of the date of the commencement of their training, a trainee will be bound by the version of this document in force at a given time. In the event that there is a discrepancy between the Training Agreement and the Curriculum, the Curriculum will prevail. This Curriculum is effective from 13th July 2020.

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Introduction

Postgraduate Specialist Training is a core function of the College. The College is the only training body in Ireland that delivers Postgraduate Specialist Training in Anaesthesiology and is accredited by the Medical Council of Ireland ('Medical Council') in order to carry out this role. Specialist training for a Certificate of Satisfactory Completion of Specialist Training ('CSCST') in Anaesthesiology, Intensive Care Medicine and Pain Medicine, is a minimum six year programme. The programme is operated and regulated by the College under the aegis of the Medical Council.

The Specialist Anaesthesiology Training ('SAT') programme develops internationally recognised anaesthesiologists with specialist clinical knowledge, technical and communication skills and a focus on patient safety and care. Training is structured to maximise opportunities for learning and to provide a broad range of experience in different types of hospitals and various sub-specialties in anaesthesia. Training comprises a combination of practical experience, clinical learning, theoretical learning, learning in non-clinical areas, individual study and mandatory elements including simulation and educational courses. There are two compulsory examinations, the Membership and Fellowship, which must be completed within specified timelines. In addition, as a trainee progresses through their training, they will be assessed and will be required to record their clinical practice and academic activity using on-line tools, e.g. logbooks, training diary. Progression through the minimum six year programme will depend upon achieving certain milestones and competencies. These will be reviewed through formal CAI interviews arranged by the Directors of Post Graduate Training and Education ('Director/s'). Completion of training will be subject to a formal Progression Exit Review, which will lead to the granting of a CSCST.

Scope of Practice in Ireland

Anaesthesiologists in Ireland require a wide range of skills to cover the practice of anaesthesiology in differing clinical environments, ranging from Model 2 hospitals for, e.g. ambulatory anaesthesia, Model 3 hospitals with, e.g. general experience of obstetric, paediatric or intensive care medicine, to Model 4 hospitals with sub-specialisation in, e.g. anaesthesia for cardiac or neurosurgery. The minimum six years of Anaesthesiology training is based in hospitals nationwide which are accredited by the College for specialist training. Training is structured to maximise opportunities for learning and to provide a broad range of experience in different types of hospitals and in different sub-specialties in Anaesthesiology.

The Medical Council of Ireland requires professional behaviour and attitudes from all medical practitioners. As such this has been highlighted in the curriculum as an essential development to achieve throughout the training process.

Aims of the Curriculum

The aims of the Curriculum are to define the learning outcomes, teaching and assessments for a specialist anaesthesiologist trainee. More specifically, it aims to:

- Provide clear requirements for each core and specialised unit of training, highlight the knowledge, skills and attitudes required to practice as a specialist anaesthesiologist;
- Guide Tutors and Fellows involved in training on suitable learning experiences for trainees;
- Encourage trainees to seek self-directed learning opportunities to complete core and specialist units;
- Outline how each learning outcome is assessed throughout the training programme;
- Encourage regular feedback between the trainee and consultants through formative workplacebased assessments ('WBA/s');
- Provide consistency and standardisation across different training sites;
- Enable comparison with international training programmes to ensure equivalency of training, experience and assessment.

Key Sections of the Curriculum

Part A: Overview and Training Regulations

Section 1: The Medical Council's Eight Domains of Good Professional Practice Section 2: Training Regulations

Part B: Clinical Domains

Section 3: Core Competency Units Section 4: Modular Units Section 5: Specialty Modular Units

Appendices

- 1. Safety and Quality of Care for Patient and Trainee
- 2. Summary of Minimum Criteria for Competence
- 3. Workplace Based Assessments
- 4. Hospital Accreditation
- 5. Exams Syllabus
- 6. Courses
- 7. CAI Competency Framework Hub

Curriculum Diagram

The training periods and sections of the curriculum are depicted on the following page.

| Curri | icul | um | Diagram |
|-------|------|----|---------|
| | | | |

| | Medical C | ouncil Eigh | nt Domains | s of Good I | Profession | al Practice | | | |
|---|--|---|---|--|---|--|---------------------------------------|----------------|--|
| SAT 1 IAC* | SAT 2 | MCAI* | SAT 3 | SAT 4 | SAT 5 | FCAI* | SAT 6 | | |
| Annual Review | Annual Review | | Annual Review | Annual Review | Annual Review | | Exit Interview | | |
| Peri-oper Anaesthe Anaesthe Anaesthe Anaesthe Reconstre Anaesthe Vascular and Tho Speciality IV This concern Anaesthe hospital] Anaesthe Intensive | etency Units rative Manage esia for Ambu esia for Ortho its : dedicate logy. The mo esia for Gene ructive Surger esia for Opht Surgery; Ana racic Surgery Iodular Units <i>is four distinc</i> esia and Analg with 6 month esia for Paed | d one-month dular units ar ral, Urologica ry; Anaesthes halmic Surger esthesia for M (: a longer de t disciplines: gesia for Obste is on-call com iatric Surgery ine (3x2 mont | y Managemen y; ry; Trauma M <i>assignment t</i> <i>e listed below</i> I and Gynaeco ia Outside of y; Anaesthesi Neurosurgery <i>dicated period</i> tric Care (6 m mitment); (6 month mo | at; GA ASA I-II; Ianagement; o a specific su ological Surge the Operating ia for Otolary and Neurora d in a subspect onths [or min | Regional Ana Transfer of th <i>ib- specialty o</i> ery; Anaesthe g Theatre; Re ngology; Anae diology; Anae <i>cialty or dual</i> | esthesia (i); ne Critically U area of intere sia for Plastic gional Anaest esthesia for esthesia for C specialty area | : and thesia (ii); ardiac a. | Exit Interview | |
| | | (See <u>Experier</u> | nce for full on | call descripti | on) | | | | |
| SAT 1-2 12-24 months Theatre on call | | | | | | | | | |
| SAT 2-5 | | ths Intensive one ICM modu | · · | ' | all and an ICM | I module eac | h year of call) | | |
| SAT 5-6 | (Requires one ICM module prior to commencing call and an ICM module each year of call) 12-18 months Senior on call (In a model 4 hospital, or an approved Model 4 Specialty hospital with 2 tiers of call) | | | | | | | | |
| Courses : (Se | ee 'Appendix | 6: Courses' fo | or full course | titles) | | | | | |
| Introduction | | rses iology; Profess Module; Diff | | | | r Access Worl | kshop; | | |
| | naesthesiolo | gy Emergen T-1/Managin | | | | | | | |
| | <i>ded Courses</i> plogy Bootca | mp/ISRA/BA | SIC/MICAS/E | cho Courses | | | | | |

*IAC: Initial Assessment of Competence; MCAI: Membership of the College of Anaesthesiologists of Ireland; FCAI: Fellowship of the College of Anaesthesiologists of Ireland; CSCST: Certificate of Satisfactory Completion of Specialist Training

Design of the Curriculum

The Curriculum is designed with the principles of *competency based medical education*, to train Anaesthesiologists to develop competent and proficient clinical practice through the application of scientific knowledge, skills and attitudes, organised into a guiding framework.

The principles of *adult learning theory co-exist*. Trainees have the opportunity to direct their own learning experience and develop a learning plan based on current clinical experience aligned with expected outcomes defined in the curriculum.

Experiential learning, under supervision, occurs with regular formative feedback to allow for reflection and to improve future performance.

Assessment of learning occurs through a number of platforms, designed to develop knowledgeable and skilled professionals who can be entrusted with work in their profession.

Regular assessment occurs to ensure trainees are meeting minimum requirements for mandatory volume of practice, formative assessments, course attendance, reflection and professional development.

| The trainee demonstrates: | Descriptor of competence: | Method of Learning / Assessment: |
|---|---|---|
| They have the knowledge of an Anaesthesiologist | Explains / Discusses / Describes / Outlines / Understands / Lists / Recalls / Knows/ Recognises | CBD MCAI - MCQ, OSCE* FCAI - MCQ, SAQ* |
| They have the ability to perform the duties of an Anaesthesiologist | Demonstrates/Performs/ Shows/ Presents/ Conducts | DOPS; VOP** MCAI – OSCE / SOE* FCAI – Clinical SOE* Mandatory Training and Simulation Courses |
| An appropriate professional behaviour | Takes responsibility/ Is patient focused/ Respects | Professionalism Courses ITA; Simulation Courses Progression Reviews |

* Multiple Choice Questions, Objective Structured Clinical Examination, Single Answer Questions, Structured Oral Exam

** Direct Observation of Procedural Skills, Volume of Practice

Electronic Portfolio (e-Portfolio)

An e-Portfolio for Training ('e-Portfolio') will be in place from July 2020. From this date, use of the e-Portfolio will be mandatory for trainees on the SAT programme. The purposes served by the e-Portfolio will be to:

- Record the trainee's profile and rotations;
- Provide for the electronic capture of volume of practice and generation of volume of practice reports;
- Record trainee and tutor interactions, including workplace based assessments;
- Record professional activities including training diary;
- Record clinical reflection;
- Provide access to learning resources;
- Provide access to Membership and Fellowship examination regulations and resources.

Certain sections of the e-Portfolio will be accessible by the trainee only, whilst other sections will be accessible by the tutor, trainee and the College.

Reflective Practice

Doctors need to think critically and to engage themselves in reflection upon their professional activities to improve their performance. This is a deliberate practice which calls for the doctor to reflect on their own practice, identify areas for improvement (especially if difficulties or unexpected problems were encountered) and develop a plan to improve their overall performance. The reflection can relate to both positive and negative experiences and the recorded learning outcomes and action plans should serve to provide a valuable learning experience for the trainee. Opportunities for reflective practice could be at the end of a module, at the end of a rotation, at the end of a training period (theatre on-call, senior on-call), after a challenging clinical experience or after an academic session. These reflections should be recorded in the trainee's e-Portfolio

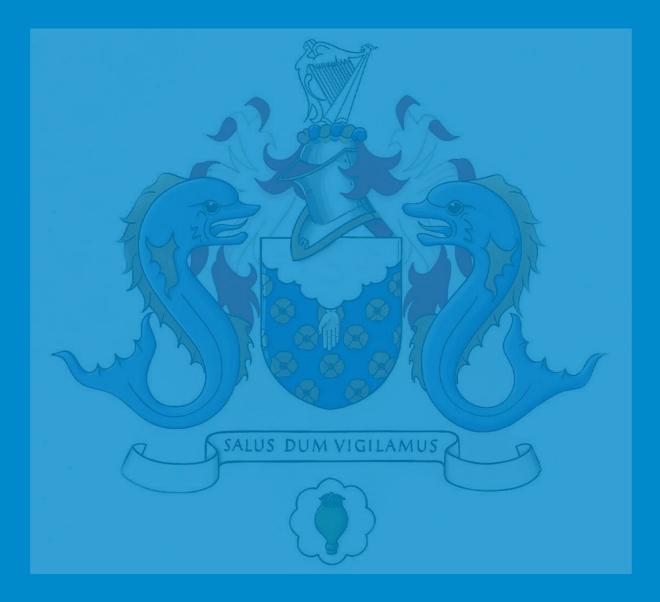
A simple model for reflection has been described by Borton*, and may be useful as a guide to learning through reflection.

- 1) What: Describe the event, the facts
- 2) So What: What did this experience mean to me? What is the interpretation, lessons and feelings?
- 3) Now what: What are the next steps? How can I use this experience to plan for the future?

*Reference: Borton, T. (1970) Reach, Touch and Teach. London: Hutchinson.

The trainee's reflective practice may be discussed at either an In-Training Assessment ('ITA') or progression interview. Ideally the trainee should complete at least one reflection per year of training. Evidence of critical reflection will be required prior to CSCST being signed off by the Progression Committee.

PART A: Overview and Regulations Training



Section One: The Eight Domains of Good Professional Practice



Section One: The Eight Domains of Good Professional Practice

The Medical Council has outlined 8 key areas or domains that constitute good professional practice in medical care within Ireland. These domains delineate a framework of competence that permeates the entire continuum of professional development from formal medical education to the maintenance of professional competence.



Eight Domains of Good Professional Practice (Medical Council)

'Good professional practice' encompasses much more than the development of robust knowledge and skills within Anaesthesiology. Of additional importance to these more clinically orientated concepts are the attitudes, knowledge and skills that contribute to a holistic philosophy of patient care. Each of the eight domains of good professional practice are briefly elaborated on in the following sections and are adapted from the Medical Council's "Guidelines for Doctors Professional Competence" <u>Guidelines-for-Doctors.pdf.</u>

Each domain description below is followed by key themes that the trainee needs to understand and put into practice.

1. Patient Safety and Quality of Patient Care **\$41.09**

Medical Council 8 Domains –

1. Patient Safety and Quality of Patient Care An anaesthesiologist has accountability to their patients, to the organisation where they are employed, to their professional body and to the Medical Council.

Patient safety is at the heart of everything overseen by the College and underpins training, education and examinations. The College is committed to a culture of safety. The College has a deliberate commitment to ensuring patient safety and quality of care. Throughout training, this quality is reinforced in daily practice. In this document where a special focus on patient safety and quality of care has been identified the following symbol will appear: **SALUS**. This Symbol is a reflection of the reef from the College Coat of Arms, which is positioned with the helmet above the shield, affording protection. The Latin word 'Salus' appears in the centre, which refers to the College's Motto on the Coat of Arms: "Salus Dum Vigilamus", which translates as "Safety while we watch". This highlights the central role safety has in the daily practice of Anaesthesiology, and the focus which is placed on deliberate practices of safety during Anaesthesiology training. Patient safety and quality of care has many dimensions and is positioned at the centre of all patient interactions, which reinforces patient safety and quality of care as the focus for all health care delivery.



The role of the anaesthesiologist includes being an advocate for patients and colleagues, demonstrating a commitment to patients through ethical practice, and actively contributing to the continuous improvement of health care quality and patient safety.

The World Health Organisation ('WHO') Patient Safety Curriculum Guide demonstrates multiple opportunities to ensure patient safety. For the anaesthesiologist in the clinical setting pertinent topics include infection prevention and control, patient safety during invasive procedures and improving medication safety. The full WHO document can be accessed in <u>Appendix 1: Safety</u> <u>and Quality of Care for Patient and Trainee.</u> The following key points have been identified for the Anaesthesiology trainee.

The Anaesthesiology trainee has a responsibility to:

Adhere to guidelines for infection prevention and control:

- Accept responsibility for minimising opportunities for infection transmission;
- Apply standard and transmission-based precautions;
- Educate patients and their families/visitors about infection transmission.

Actively participate in measures to ensure patient safety associated with invasive procedures:

- Follow verification processes to avoid wrong patient, wrong site and wrong procedure errors (e.g. WHO safe site surgery checklist);
- Practise techniques that reduce risks and errors (e.g. time-outs, briefings, debriefings, stating concerns);
- Participate in an educational process for reviewing mortality and morbidity;
- Actively engage as a team member;
- Actively engage with the patient at all times;
- Document all procedures in a legible and timely manner.

Understand and engage with practices to improve medication safety:

- Understand the issues and risks involved in the use of medication;
- Understand common sources of error;
- Understand the responsibilities associated with prescribing and administering medication;
- Know which medications are high-risk;
- Develop checking routines.

Throughout the clinical components of the curriculum, the symbol **SALUS** identifies Patient Safety and Quality of Care as the core domain of Good Professional Practice associated with the specific stated expected standard. These standards have been collated and can be viewed in <u>Appendix 1: Safety and Quality of Care for Patient and</u> <u>Trainee.</u>

2. Relating to Patients

Medical Council 8 Domains – 2. Relating to Patients

This involves a partnership built on mutual respect, confidentiality, honesty, responsibility and accountability.

The National Specialist Anaesthesiology Training Programme aims to develop positive relationships with patients, which are characterised by trust and the involvement of patients and families as partners in their care.

The Anaesthesiology trainee has a responsibility to:

- Demonstrate cultural awareness and sensitivity with patients and colleagues;
- Understand basic communication techniques including informed consent;
- Understand the principles of open disclosure;
- Place specific focus on patient pertinent interactions in Anaesthesiology;
- Discuss all aspects of end of life care, including Advanced Healthcare Directives, and demonstrate sensitivity towards patients, families and colleagues in these circumstances.

3. Communication and Interpersonal Skills

Medical Council 8 Domains –

3. Communication and Interpersonal Skills Professional practitioners must possess excellent interpersonal communication abilities to enable the effective exchange of information and allow for positive collaborations. This encompasses working with patients and their families as well as other clinical and non-clinical colleagues and the general public.

The Anaesthesiology trainee will be expected to demonstrate effective communication skills, including:

- Active listening;
- Encouraging discussion;
- Reinforcing points;
- · Awareness of verbal and non-verbal clues;
- Adapting to individual patient context, displaying cultural sensitivity;
- Recognising and addressing miscommunication, and barriers to communication;
- Accurately elicit and synthesise relevant information;
- Accurately explain relevant information, in both oral and written format;
- Document patient interactions in a legible and timely manner.

4. Collaboration and Teamwork

Medical Council 8 Domains – 4. Collaboration and Teamwork

Practitioners should co-operate with their colleagues and be able to work effectively with healthcare providers and teams from a range of disciplines outside their respective area of expertise. They should ensure that clear lines of communication and systems for accountability are in place among all involved team members in order to protect their patients.

The Anaesthesiology trainee will be expected to:

- Develop rapport, trust and ethical therapeutic relationships;
- Participate effectively and appropriately in the multi-disciplinary healthcare team;
- Effectively work with other healthcare professionals to prevent and resolve inter-professional conflict;
- Respond promptly to requests for assistance or advice.

5. Management (including Self-Management)

Medical Council 8 Domains – 5. Management (including Self-Management)

A professional practitioner should have an understanding of how working in the health care system, delivering patient care and how other professional activities affect other healthcare professionals, the healthcare system and society in general.

The Anaesthesiology trainee will be expected to: 1) Have an approach to self-management

- Be committed to maintaining one's own health, and sustainable practice;
- Develop leadership and effective management skills in professional practice.
- 2) Have an approach to support colleagues
 - Appreciate professional obligations, and the interventions required, when a colleague is impaired or practicing beyond the limits of their capabilities;
 - Promote a culture that recognises, supports and responds effectively to a colleague in need.

3) Understand their role within the healthcare system

- Contribute to the improvement of healthcare delivery in teams, organisations and systems;
- Develop efficient and effective work practices;
- Allocate finite healthcare resources appropriately;
- Understand how to respond, manage and learn from a complaint or legal proceeding.

- 4) Understand how their daily practice influences society in general
 - Minimise the environmental impact of anaesthesia and incorporate sustainability into their daily practice;
 - Understand the contribution of the practice of anaesthesia to the carbon footprint of healthcare practices;
 - Support education, research and continuous improvement in sustainability.

The College is committed to supporting trainee's wellbeing throughout their working life. The College advises trainees to monitor their physical and emotional wellbeing and to seek assistance early if they have any concerns or feel they are experiencing significant stress. Further information for resources for personal wellbeing are available in <u>Appendix 1: Safety and Quality of Care for</u> <u>Patient and Trainee.</u>

6. Scholarship

Medical Council 8 Domains – 6. Scholarship

Medical practitioners must acquire, understand and demonstrate the large body of knowledge at the forefront of learning within their speciality, as part of the continuum of lifelong learning. They must also demonstrate the capacity to source the best information and evidence to guide their practice as part of a commitment to scholarly activity.

The Anaesthesiology trainee will be expected to engage in continuous enhancement of professional activities through ongoing learning:

- Critically evaluate information, its sources, and integrate best available evidence into practice;
- Contribute to the creation and dissemination of knowledge and practice applicable to anaesthesia and healthcare;
- Teach others.

Ongoing Professional Competence and demonstration of scholarship should be documented in the training diary, see <u>Appendix 1: Safety and Quality of Care for Patient and Trainee</u>. The training diary is a preparatory reflection for the trainee of the requirements of the CAI Professional Competence Scheme ('PCS'). All doctors registered and working in Ireland have a legal duty to maintain a record of their professional competence.

7. Professionalism

Medical Council 8 Domains – 7. Professionalism

Medical practitioners must show a commitment to upholding the standards outlined in the Medical Council's "Guide to Professional Conduct and Ethics for Registered Medical Practitioners".

The Anaesthesiology trainee will be expected to exhibit appropriate professional behaviour in practice, including, but not limited to:

- Showing respect for confidentiality and privacy of patients and colleagues;
- Punctuality;
- Working in a calm and considered manner, even in stressful situations;
- Contributing to culture of quality improvement;
- Ensuring adequate and legible record keeping.

8. Clinical Skill

Medical Council 8 Domains – 8. Clinical Skills The development and maintenance of professional capability in the domain of clinical skills in Anaesthesiology is required.

Competence should be demonstrated through the achievement of minimum volume of practice, and workplace based assessments, as outlined in <u>Appendix 2: Summary</u> of <u>Minimum Criteria for Competence</u> and <u>Appendix 3:</u> <u>Workplace Based Assessments</u>. This fulfils the requirement to demonstrate and provide evidence of best practice for patient care, which lie at the forefront of the discipline.

The Anaesthesiology trainee will be expected to:

- Practice medicine within their defined scope of practice and expertise;
- Perform a complete patient centred clinical assessment and establish a management plan;
- Demonstrate proficient and appropriate technical and procedural skills;
- Demonstrate safe, effective and efficient patient centred care.

These eight domains of good professional practice are not unique to specialist training and professional practice in Anaesthesiology, and are applicable in all contexts of medical practice for all doctors practicing in Ireland.

Accreditation for specific competencies is determined by the CAI Hospital Accreditation Process. A table outlining current accreditation for each training hospital is outlined in <u>Appendix 4: Hospital Accreditation</u>.

The trainee is expected to build their portfolio of professionalism throughout their training programme. This assessment of Professionalism will form a component of the criteria to be awarded a CSCST.

Minimum criteria for assessing Good Professional Practice:

| 1 | Demonstrates Safety and Quality of Patient care Is vigilant in planning, execution and documentation of clinical activity Complies with local infection control measures Completes and presents findings of clinical Audit | |
|---|---|--|
| 2 | Demonstrates an ability to relate to patients and plan, deliver and document clinical care Negotiates with other team members to prioritise patient care, taking into account factors including urgency of care, patient and procedural requirements | |
| 3 | Demonstrates Communication and interpersonal skills Demonstrates a respectful attitude towards all members of inter-professional team | |
| 4 | Demonstrates Collaboration and Teamwork Works collaboratively with colleagues and other healthcare professionals e.g. on research, educational and quality assurance and other administrative tasks | |
| 5 | Demonstrates Management Demonstrates personal management as demonstrated through punctuality, reliability, ability to cope with stress and organisational skills Demonstrates leadership in healthcare – e.g. evidence of committee participation, rota co-ordinator, LAT, CAT, appraisal of guidelines, protocols or care bundles | |
| 6 | Demonstrates Scholarship Demonstrates ability to teach a skill e.g. Gives a lecture/facilitates a tutorial Demonstrates attendance at scientific meetings | |
| 7 | Demonstrates Professionalism Exhibits appropriate professional behaviour, including: Showing respect for confidentiality and privacy of patients and colleagues Working in a calm and consistent manner even in a stressful situation Responding to request for assistance or advice, taking responsibility for ensuring ongoing care | |
| 8 | Demonstrates Clinical Skills 12-18 months senior on call in model 4 or approved model 4 specialty hospital (See <u>Experience</u> for full on call description) Demonstrates management of the complex case (ASA 3-4) | |
| 9 | Reflection: minimum of 6 reflections throughout training, documented in e-Portfolio | |

Section Two: Training Regulations



Section Two: Training Regulations

Governance

Training and Education Committee

The Training and Education Committee of the College ('the Training Committee') has overall responsibility for the implementation and maintenance of the National Specialist Anaesthesiology Training Programme ('the Training Programme' or 'Programme'). The Committee is governed by the Terms of Reference as stipulated by the Council of the College ('the Council'). The Training Committee is responsible for the following:

- Approval of hospital training posts;
- Recruitment of trainees for the training programme;
- Allocation of trainees to approved hospital posts ('rotations');
- Assessment and progression of trainees during the programme;
- Recommendation for award of CSCST.

The day to day administration of the Programme is managed by the CAI Training Department ('Training Department'), overseen by the Director and Deputy Director of Postgraduate Training and Education, 'the Directors'. The Training Committee reports to Council.

Progression Committee

The Progression Committee is a sub-committee of the Training Committee. The Progression Committee has oversight of the Progression Review process. The Committee comprises the following:

- Director of Training;
- Deputy Director of Training;
- Chair of Training who will also Chair the Progression Committee;
- A second member of Council who should be either a member of the Council Executive or another Chair who sits on the Training Committee;
- Training Manager;
- Chief Executive Officer or Chief Operations Officer.

The role of the Progression Committee is to ensure all Progression Reviews are completed annually and to adjudicate on issues regarding trainee progression referred to it by the Training Department. Further details are outlined under <u>Progression Review</u>.

Requirements for Trainees Structure of Training Programme

Specialist Anaesthesiology Training ('SAT'), including Intensive Care Medicine ('ICM') and Pain Medicine, comprises a programme of training, assessment, formal examination and accreditation which is organised and regulated by the CAI. The minimum duration of the programme is six years. This is generally structured as two years of basic training (SAT 1 & 2) and four years of general and sub-specialty training (SAT 3 - 6).

Entry to the programme is by competition including interview. Transition from SAT 2 to SAT 3 is subject to successful completion of the Membership Examination and a Progression Review. To transition from SAT 5 to SAT 6, the trainee must hold the Fellowship of the College by having successfully completed the Fellowship Examination and complete a Progression Review. At both of these milestones, (i.e. at the end of SAT 2 and end of SAT 5) a formal progression interview takes place where all aspects of training to date will be reviewed. A summary of the key requirements of the SAT Programme are illustrated below:

| ТІМЕ | • Minimum 6years |
|---------------------|---|
| CLINICAL DOMAINS | Core Modular Specialty Modular |
| EXAMS | • MCAI • FCAI |
| COURSES | TrainingSimulation |
| ASSESSMENT | In Training Assessments Progression Reviews ExitInterview |
| CSCST | Anaesthesiology Intensive Care Medicine Pain Medicine |

Entry to SAT Programme

Recruitment to the Anaesthesiology Training Programme is through the CAI centralised appointment process. The training year runs from July each year. Applications are invited through advertisement on the College website, usually in November for appointment the following January / February and commencement on the programme in July.

Application Criteria

- · Applicants must have a medical degree;
- Applicants must have completed or be currently in their intern year;
- Applicants must meet the criteria for inclusion on the Trainee Specialist Division of the Medical Council Register;
- Applications must be submitted via the College's online application process;
- No retrospection will be allowed for Anaesthesiology experience gained prior to entry to the Programme, i.e. the full minimum six years training must be completed for all applicants appointed.

Recruitment Process

- Entry to the Programme is by competition including interview;
- Successful applicants will receive a formal notice of appointment and will be required to sign (by electronic means) a Training Agreement before commencing on the Programme. The Training Agreement sets out the conditions applicable to the trainee's participation on the programme but is not a contract of employment;
- Successful applicants may not defer their place on the Programme to the following year;
- At the time of offer, trainees will be advised of the planned rotations for the first two years of training.

Appointment of Trainees

On appointment, trainees will be allocated to a training hospital and will be provided initially with rotations for the first two years of training. In addition, the trainee will be allocated by the Anaesthesiology Department within the hospital to a College tutor. Trainees will be scheduled to attend an Induction Day at the College prior to the Programme start date, attendance will be mandatory and monitored by the Training Department. Information regarding the allocation of rotations and tutors is provided below.

Hospital Rotations

Rotations, which are on a 6 monthly basis, are designed to enable achievement of all competencies over the six years of the Programme. Rotations are allocated by the Directors' Office under the aegis of the Training Committee. The six years of rotations are designed to ensure each trainee gains experience in different hospital settings, e.g. central, peripheral, general and specialised. Therefore, it is required that all trainees will rotate to hospitals outside the major centres of Dublin, Cork or Galway. All trainees should ideally rotate across two geographical regions and must spend at least 12 months in a Dublin hospital, 12 months outside the Eastern Region and at least 6 months in a Model 3 hospital. For current regions, please see website <u>SAT Hospitals by Region</u>.

Ideally trainees should rotate as allocated. However, recognising various demands, it is acknowledged that trainees may seek to change their allocation. To change an allocated rotation, a trainee must arrange a swap in adherence with the guidelines below:

- Trainees can only swap with trainees in the same year of training;
- The College needs notice of a potential swap at least 6 months in advance of the start date, so by 30th June for a January swap and by 31st December for a July swap;
- All swaps have to be notified in writing to the Training Manager with the reason for the request clearly outlined and approved at the subsequent Training Committee meeting;
- Neither party can create a situation where a key component of the rotation is compromised e.g. missing a module necessary for CSCST or experience in a Model 3 hospital (minimum 6 months) or to avoid the general rule that all trainees need to experience Anaesthesiology training in at least two geographical regions in a national 6-year training scheme;
- Requests to change an allocation without being replaced in the allocated hospital cannot be accommodated.

The trainee will be contacted by the Medical Manpower Department of each hospital before the commencement of a 6/12 rotation to arrange the contractual aspects of their employment. The College has no function in contractual matters or salary issues between trainees and their employers. For each rotation the trainee will receive a contract of employment from the training hospital setting out the terms and conditions of the trainee's employment for that period. The training hospital, as employer, and not the College, will be responsible for the remuneration of the trainee and all management issues to include payroll, reporting lines, organisation of working time, allocation of tasks, annual leave, workplace grievances and disciplinary issues. Employment at a training site is subject to the local recruitment and other employment policies. No contract of employment will exist, at any time, between the College and the trainee. Workplace grievances relating to conditions of employment must be addressed with their employer. Trainees should familiarise themselves with the medical and well-being supports available at a local level and within the broader hospital environment.

College Tutors ('Tutors')

While a trainee may work with a number of consultant Anaesthesiologists during the course of their training, they will be supervised by the appointed College tutor. Details of the role and responsibilities of the tutor are outlined under <u>Guidelines for Tutors</u> below.

Commencement of Training

On commencement of each rotation, the trainee will meet with the tutor and agree training objectives for the following six months. The agreed objectives should be recorded on the trainee's e-Portfolio. In all circumstances, the trainee and tutor should arrange a further meeting at the mid-way point of the rotation to ensure that these objectives are being met and again at the end of the rotation and maintain a record of these meetings on the trainee's e-Portfolio. Options and availability of training modules should be discussed at the beginning of each rotation.

Assessment of Training

Training is assessed at a number of stages through the programme and by using a variety of methods. In order to be deemed to have complied with these Training Regulations, the trainee is required to satisfactorily complete all required assessments. Details of the assessment process are outlined under <u>Progression</u> through Training.

Examination Requirements

Trainees are required to complete the Membership ('MCAI') and Fellowship ('FCAI') Examinations of the College within the stipulated timelines. The Membership Examination must be passed to enable a trainee progress from SAT 2 to SAT 3 and the Fellowship Examination must be passed to enable a trainee progress from SAT 5 to SAT 6. Full details of exam requirements are outlined in the Examination Syllabus, see <u>Appendix 5: Examination</u> <u>Syllabus</u>

Award of Certificate of Satisfactory Completion of Specialist Training ('CSCST')

To be awarded a CSCST, a trainee must meet all of the requirements as outlined in this section:

Experience

- Pass the Initial Assessment of Competence, see_ <u>Appendix 2: Summary of Minimum Criteria for</u> <u>Competence</u>, and be rostered for theatre on call duties during the first six-month rotation;
- Rotate to hospital sites as allocated by the College.

Rotations are designed to ensure all competencies can be achieved within the six-year training programme although the College reserves the right to require further training or assessment;

- Provide evidence of sufficient case mix by means of an up to date log book which should reflect the minimum volume requirements outlined in the <u>Guide to the</u> Clinical Components of the Curriculum;
- Completion of all Mandatory Training and Simulation Courses as stipulated by the College, any exceptions must be approved by the Progression Committee;
- Complete on-call duties appropriate to level of training as follows:
 - 12 24 months on the theatre on-call rota. A minimum of 12 months and maximum of 24 months applies in a general hospital. It is acknowledged that a trainee may complete additional theatre on-call time in a specialised hospital, e.g. obstetrics;
 - Intensive Care on-call, i.e. on the Intensive Care Medicine ('ICM') roster, should only be undertaken after a minimum two-month module in ICM. The guideline is that a trainee should spend a minimum of 18 months ICM on-call, with a maximum of 3 years. During the two years that they are on the ICM rota, they should complete a two-month module each year as a minimum standard;
 - A trainee may only be rostered senior on-call duties following successful completion of the Fellowship Examination. At least 12 months and ideally 18 months should be completed at senior on-call. Hospitals currently able to assign senior on call roles include model 4 hospitals as outlined in <u>Hospital</u> <u>Accreditation by Competency</u>. Upon specific application other hospitals, Model 4 specialty and Model 3 hospitals with suitable case complexity and caseload, may apply for senior on call recognition. This, however, remains at the discretion of the Training Committee, and will apply to a maximum of 6 months' recognition of the recommended 18 months senior on-call required;
 - The role of senior on call in these institutions is:
 - To co-ordinate theatre on call services and allocate resources according to need;
 - To collaborate with surgical and nursing staff to ensure smooth on-call services;
 - Liaise with on-call consultant as the need arises;
 - To supervise and support the 1st on call in theatre;
 - To offer support to the ICM on call;
 - To respond to referral for Anaesthesia and Intensive Care service from within the hospital.

Knowledge

- Successful completion of MCAI by end of SAT 2;
- Successful completion of FCAI by end of SAT 5;
- Completion of all Mandatory Training and Simulation Courses as stipulated by the College, see <u>Appendix 6:</u> <u>Courses</u>. Any exceptions must be approved by the Progression Committee.

Competency

- The trainee demonstrates satisfactory standards of competence in all elements of observable and measurable knowledge, skills, abilities and professionalism which contribute to the safe and efficient delivery of anaesthesia (including Core Competency Units, Modular Units and Specialty Modular Units) and:
 - The trainee demonstrates the ability for independent clinical practice with clinical judgement to safely plan and deliver care with a range of techniques;
 - The trainee performs at the expected standard for each of the clinical units;
 - The trainee demonstrates excellence in all domains of Good Professional Practice.

Full details of the skills and competencies, together with assessment and sign off requirements are outlined in Section Three: <u>Core Competency</u> Units, Section Four: <u>Modular Units</u> and Section Five: <u>Specialty Modular Units</u>. Some competencies need to be completed during SAT 1 and 2, some during SAT 3 to 6 and some can be completed throughout the six years. A summary of the competencies is outlined under <u>Structure of the Curriculum</u>

A trainee is required to engage with their supervising consultant to develop their competencies, skills, dexterity and professionalism in clinical practice. This is documented using workplace based feedback reports / tools namely DOPS, Mini-CEX and Case Based Discussion. These documents should be recorded in the trainee's e-Portfolio. The numbers required for each competency are outlined in <u>Part B Clinical Components</u>.

Progress towards achieving these competencies will be monitored by the tutor on behalf of the Anaesthesiology Department on an ongoing basis. Achievement of the competencies can be finalised at the In-Training Assessment ('ITA') by the Anaesthesiology Department and confirmation will be by means of the Progression and Exit Interviews undertaken by the College.

Hospitals where Competencies can be completed

Accreditation for specific competencies is determined by the Hospital Accreditation Process. A table outlining current accreditation for each training hospital is outlined at Appendix 4: <u>Hospital Accreditation by Competency</u>

Professionalism

- Completion of both the Professional Competence Development (SAT 1) and Professionalism in Practice (SAT 5/6) programmes;
- Evidence of Leadership and Teamwork senior on call experience, management of a rota, teaching and / or management of a teaching programme, completion of audits, presentation of research, audit or case series at hospital or College event;
- Contribution to the broader anaesthetic community, e.g. role of Lead Anaesthesiology Trainee ('LAT'), membership of the Committee of Anaesthesiology Trainees ('CAT') or other professional bodies, use of non-clinical time and special projects, e.g. in College, volunteers for Careers / Open Days;
- Completion of the training diary (see <u>Appendix 1.3:</u> <u>Training Diary</u>) to demonstrate:
 - attendance at educational events organised by College, Hospitals, Faculties and Societies;
 - completion of one quality improvement project, which may be an audit. Clinical Audit can be defined as the "systematic review and evaluation of current practice with reference to research based standards to improve patient care." The setting of standards, measurement of practice compared to 'gold standard', identification of deficiencies and addressing deficiencies (closing the loop) is an accepted model of clinical audit as defined by the Medical Council;
- Maintenance of log book as outlined under <u>Experience</u> above;
- Completion of the e-Portfolio reflecting the Minimum Expected Standards of Good Professional Practice;
- Evidence of engagement with the prescribed number of workplace based assessments as outlined in_ <u>Appendix 3: Workplace Based Assessments</u>.

Review of a trainee's progress under the four headings above - **Experience, Knowledge, Competency and Professionalism** will be carried out at annual Progression Reviews and at a final exit interview and in order to be awarded a CSCST, a trainee must meet all the requirements under these four headings and complete satisfactory progression and exit reviews.



Curriculum for the National Specialist Anaesthesiology Training Programme

The College reserves the right to decline to award a CSCST in circumstances where any of the requirements set out in detail in the above section <u>Award of Certificate</u> <u>of Satisfactory Completion of Specialist Training ('CSCST')</u> are not complied with by the trainee. To summarise, the circumstances under which a CSCST will not be awarded are outlined below:

Experience

Failure to complete any of the requirements under the 'Experience' section of the Award of Certificate of Satisfactory Completion of Specialist Training above, including but not limited to:

- Failure to satisfactorily complete one or more rotations as allocated;
- Failure to maintain the log book as required and / or failure to meet minimum volume requirements;
- Failure to complete one or more core competency units, one or more modular units and / or one or more specialty modular units as outlined in the Structure of the Curriculum;
- Failure to satisfactorily complete the full range of on-call requirements as stipulated under 'Experience' above.

Knowledge

Failure to complete any of the requirements under the 'Knowledge' section of the Award of Certificate of Satisfactory Completion of Specialist Training above, including but not limited to:

- Failure to pass either MCAI and FCAI examinations within proscribed timelines;
- Failure to satisfactorily complete all allocated Mandatory Training and Simulation Courses unless exceptions have been approved by the Progression Committee.

Competency

Failure to complete any of the requirements under the 'Competency' section of the Award of Certificate of Satisfactory Completion of Specialist Training above, including but not limited to:

- Failure to satisfactorily complete the prescribed number of workplace based feedback reports;
- Failure to achieve the expected standard within each clinical unit, as stipulated in the Structure of the Curriculum.

Professionalism

Failure to complete any of the requirements under the 'Professionalism' section of the Award of Certificate of Satisfactory Completion of Specialist Training above, including but not limited to:

 Failure to complete either or both of the two Professionalism courses – Professional Competence Development (SAT 1) and Professionalism in Practice (SAT 5/6) programmes;

- Failure to demonstrate appropriate levels of leadership, professional and / or teamwork, as required in the Minimum Expected Standards of Good Professional Practice:
- Failure to complete the Training Diary to the standard required;
- Failure to satisfactorily maintain a record of workplace based feedback reports / tools.

Progression Through Training

Overview

Ultimate progression of trainees is determined by the <u>Progression Committee</u>. Assessment of trainees takes two forms:

- in the hospital with the College tutor during each six-month rotation which is the conduit for the collective view of the department; and
- by means of a Progression Review, held annually and conducted by the Training Department.

Assessments carried out in the hospital are considered to be formative, whereas the Progression Reviews held by the College are considered summative, i.e. they must be completed successfully for a trainee to progress.

The Assessment Process

The assessment process is summarised below:

| SAT 1 | SAT 2 | SAT 3 | SAT 4 | SAT 5 | SAT 6 | сѕсѕт |
|---------|---------|---------|---------|---------|-------------------|-------|
| IAC | 2 x ITA | |
| 2 x ITA | MCAI | APR | APR | APR | Exit Interview | |
| APR | APR | | | FCAI | | |

*IAC: Initial Assessment of Competence; ITA: In-training assessment, including unit sign off; APR: Annual Progression Review, including review of logbook, training diary, reflection; MCAI/FCAI: College examinations.

Initial Assessment of Competence ('IAC')

This Assessment is normally performed within three months of commencement of training. The Assessment reflects the skills which should normally be acquired by this stage and which are needed before undertaking the extra responsibility of on-call duties. Details of this Assessment are outlined in the Initial Assessment of Competence (IAC'), accessed in <u>Appendix 2: Summary of</u> <u>Minimum Criteria for Competence</u>. It is a requirement to pass this test to progress to Theatre on-call.

In-Training Assessments ('ITA') - Summary

The ITA Process is conducted by the assigned College tutor within the Anaesthesiology Department and is an integral part of the assessments for the College Training Programme. It complements other assessments, such as the Membership and Final examinations, by reviewing trainee performance in the workplace. In summary, the ITA report to the College is the end result of a six-month long process with three well defined stages, outlined in further detail below.

The ITA Process in Detail

The goals of the ITA Process are to:

- Discuss and set appropriate clinical and educational goals for the training period for each trainee;
- Ensure that both the Anaesthesiology Department and trainee expectations are understood and agreed so that a realistic plan for the period is confirmed;
- Assess a trainee's progress towards obtaining the agreed clinical and educational goals;
- Provide trainees with regular, constructive feedback;
- Develop any remedial activities that may be required to ensure that the trainee is performing at or above the level expected for their stage of training.

Start of the six months

- Trainee and tutor meet to set objectives for the six-month rotation, identifying required modules, competencies, educational activity, exam preparation and course attendance. The agreed objectives should be recorded on the trainee'se-Portfolio;
- The Anaesthesiology Department should be aware of agreed objectives so that the trainee can be facilitated in meeting their objectives.

Middle of the six months

- A departmental meeting of consultants involved in training should be held in the hospital half way through the six-month period;
- The progress of each trainee should be discussed including assessment of progress towards meeting goals and objectives using the log book and feedback forms (DOPS, CBD and Mini CEX);
- The tutor should meet with each trainee to discuss progress and understand how the trainee views their own progress. A record of these meetings should be noted on the trainee's e-Portfolio.

Trainee not progressing at middle of rotation:

In the event that it is identified at this stage that a trainee is not progressing in terms of their skills and training in line with expectations, the tutor and one other consultant should arrange to meet the trainee. The Chair of the Anaesthesiology Department should be informed that a meeting has been scheduled and the steps outlined below should be followed:

- Set aside a formal time for the meeting, providing sufficient advance notice to the trainee together with names of attending consultants;
- Provide the trainee with the opportunity to give their own assessment, allowing them to identify and discuss any difficulties they may be experiencing;
- Identify areas that need to be addressed by clearly explaining deficiencies and communicating the expected standard;
- Put in place appropriate supports e.g.:
 - Targeted training involving closer additional supervision and more frequent feedback on progress;
 - Intensified supervision or opportunity for repeat experience;
- Ensure that steps are agreed with the trainee;
- Set a date for progress to be reviewed ensuring enough time is allowed for the trainee to have made progress;
- The tutor should organise individualised learning experiences if appropriate to assist with difficulties with examination preparation or presentation technique, acquisition of clinical skills or interpersonal skills development. The trainee has a responsibility to actively participate in these activities;
- Document each meeting and have document signed by tutor, other consultants and the trainee.

The above steps are to ensure that the trainee is not presented with issues regarding their progress at a time when it is too late to remedy – further guidance is provided under <u>Trainee not progressing in line with expectations - Clinical</u>

End of the six months

- A departmental meeting should be held in the hospital at least two weeks prior to the end of the six-month training period at which each trainee's progress will be discussed in advance of completion of the ITAs;
- In advance of this meeting the tutor should ensure that each trainee has supplied them with a summary of their logbook activity for the six month period. This will provide the department with the scope of clinical activity the trainee has been exposed to and will contribute to departmental assessment and signing off for each unit;
- If requested to do so, the trainee should provide further evidence, including a summary of their training diary, WBA and reflective practice in advance of the departmental meeting;
- At least 50% of the consultant complement should be in attendance at the meeting or, if unable to attend, consulted in advance to inform the meeting. The tutor should document names of those in attendance at the departmental meeting and those absent but who provided input to the meeting;

- At the meeting the progress of all trainees in the department should be discussed;
- Specifically, the clinical progress of each trainee should be discussed and assessed by reference to the minimum criteria to assess completion of a unit;
- A consensus opinion of consultants present should then be entered on to the ITA for disclosure to the trainee;
- The tutor should arrange individual meetings with each trainee where the trainee has an opportunity to discuss their assessment with the tutor and to receive feedback. This meeting should, ideally, have two consultants present;
- If the trainee is in agreement with the ITA, electronic sign off on the e-Portfolio should be completed by both the trainee and the tutor;
- The tutor is responsible for completing the ITAs on line. The details of the assessment should always be discussed with the trainee and this should be indicated on the ITA.

Unsatisfactory ITA

In the event that a trainee who had been identified as not progressing in line with expectations at the mid-point assessment and the steps outlined above have not resulted in sufficient progress being made, the trainee should receive an 'Unsatisfactory' marking on the on-line ITA form with the reasons clearly documented and explained to the trainee;

- If the trainee is not in agreement with the assessment, this should be referred to the Department Chair and the College should be notified;
- An 'Unsatisfactory' ITA should be notified to the College in advance of the trainee's Progression Review or on completion in the case of a July – January rotation. Refer to <u>Trainee not progressing in line with expectations -</u> <u>Clinical</u> for next steps.

Confirmation of Competencies

- At the end of the rotation meeting, agreement should be reached between the tutor and the trainee regarding completion of competencies. This should be in line with the criteria outlined in the Part B: Clinical Components;
- The tutor should complete on-line sign off for each competency as appropriate.

Note regarding leave:

Where a trainee has been on leave, other than annual leave, during the six-month period, satisfactory sign off requires that at least 3 months with full and appropriate on call duties have been completed.

Progression Review

For trainees in SAT 1 to SAT 5, a review meeting is held during each academic year where one of the Directors (or their nominee) will arrange to meet each trainee. This provides an opportunity for both the Training Department and the trainee to discuss training progress and for the trainee to provide feedback on the programme. All reviews will be organised by the Training Department and at least two weeks' notice will usually be provided. It is mandatory for trainees to attend.

The annual Progression Review meeting is an integral part of the programme. It provides the opportunity for the Directors to establish that a trainee is progressing according to expectations and to identify at an early stage if intervention is required. It is essential that the trainee prepares appropriately for this review meeting.

Two representatives of the Progression Committee, usually either the Director or Deputy Director of Training or their nominee and the Training Manager or their nominee, will meet every trainee on an annual basis for a Progression Review. The review meeting provides an opportunity for both the Training Department and the trainee to discuss training progress and for the trainee to provide feedback on the programme. At the interview, each trainee should bring:

- Summary of their log book;
- Summary of their training diary;
- Summary of their workplace based assessment portfolio;
- Evidence of reflective practice.

Training Department will bring:

- A copy of rotations;
- ITA's;
- Exam results;
- Up to date information on competencies completed;
- Up to date information on Mandatory Training and Simulation Courses completed.

The trainee's progress will be discussed in detail. Specific milestones will be checked, e.g. passing of exams within specified timelines and accumulation of appropriate on-call experience. The Directors will ascertain whether adherence to the mandatory components of the Programme meets requirement and will determine if any action is required, e.g. adjustment to rotations, re-scheduling attendance at Mandatory Training or Simulation Courses. Where the review is considered satisfactory, the presiding Director will confirm progression.

Trainee not progressing in line with expectations - Clinical

STEP 1: Formal meeting with trainee in the Hospital - after 1st Unsuccessful ITA STEP 2: 1st Formal meeting in CAI support provided/ change to rotation STEP 3: 2nd Formal meeting in CAI extended time or withdrawn

With the CAI Progression Committee

Overview

As identified under the above section <u>The ITA Process</u> <u>in Detail</u>, it may be identified during a six-month rotation that a trainee is not progressing clinically in line with expectations. Responsibility for identifying and addressing this situation rests with the training site's Anaesthesiology Department staff in the first instance, specifically tutors and trainers.

In the first instance, efforts should be made within the training site's Department to address any difficulties and guidelines in this regard are outlined in the sections below.

Concerns about trainee performance – identifying trainees in difficulty

Identifying trainees in difficulty, whose workplace performance or progress is below the standard expected for their stage of training, is an essential role for everyone involved with the Training Programme. In all situations, the welfare of patients and trainees must be considered.

Staff members within the training site's Department with concerns about any aspect of a trainee's performance must discuss their concerns promptly with the tutor. The tutor should take steps to address such concerns by making specific, confidential enquiries about the perceived issues and gathering information from relevant staff members as well as the trainee.

Unless the issues are serious, i.e. threaten patient safety, or are reasonably believed to represent professional misconduct, the approach for training issues is one of a staged response providing support and remedial strategies to improve performance. The objective is to overcome difficulties in a supportive, holistic and collaborative manner within a specified timeframe. Where an issue arises which is reasonably considered to be serious or is reasonably believed to represent professional misconduct:

- (a) the CAI reserves the right to suspend the trainee, as a precautionary measure, from the Programme pending the outcome of any investigation, disciplinary process or Medical Council process which is implemented; and/or
- (b) to escalate the process to Step 3 without recourse to Steps 1 or 2.

Note:

Concerns regarding employment issues should be managed by the employer's Human Resources Department. The Chair of Department should be made aware of such employment issues.

Initial steps to address apparent under performance - clinical

Step 1- Formal meeting with Trainee in the Hospital:

The tutor and one other consultant should meet with the trainee to seek to address the issue. Such a meeting can take place at any time during the rotation and is not limited to the middle or end of the rotation. However, the mid rotation meeting (detailed under <u>Trainee not</u> <u>progressing at middle of rotation</u>:) can constitute this step. The meeting should proceed as follows:

- Set aside a formal time for the meeting, providing sufficient advance notice to the trainee;
- Provide the trainee with the opportunity to give their own assessment, allowing them to identify and discuss any difficulties they may be experiencing;
- Identify areas that need to be addressed by clearly explaining deficiencies and communicating the expected standard;
- Put in place appropriate supports e.g.:
 - Targeted training involving closer additional supervision and more frequent feedback on progress;
 Intensified supervision or opportunity for repeat
 - experience;
- Ensure that steps are agreed with the trainee;
- Set a date for progress to be reviewed ensuring enough time is allowed for the trainee to have made progress;
- The tutor should organise individualised learning experiences if appropriate to assist with difficulties with examination preparation or presentation technique, acquisition of clinical skills or interpersonal skills development. The trainee has a responsibility to actively participate in these activities;
- Document each meeting, the document must be signed by the tutor, other consultant and the trainee.

If these steps above do not result in sufficient progress being made, the trainee should receive an 'Unsatisfactory' ITA marking on the on-line ITA form as outlined under the above section <u>The ITA Process in Detail</u> and the College should be notified.

Note regarding documentation:

It is essential that proper records of discussions and any actions agreed with the trainee are maintained by the Anaesthesiology Department in the hospital. The trainee's acknowledgment should be obtained by means of their signature on the appropriate documents, e.g. action plans, intermediate assessments etc.

Step 2 - 1st Formal Meeting in the CAI with the Progression Committee:

First Unsatisfactory ITA

Where an 'Unsatisfactory' marking has been given for an ITA, the trainee should be met by two members of the Progression Committee in the College. Following the meeting, a report will then be prepared identifying steps that need to be taken to restore the trainee to normal progression. These steps may result in a change in rotations. Where these steps are agreed with the trainee, implementation will proceed with the outcome notified to the Progression Committee.

The Progression Committee will agree with the trainee whether supports need to be continued in the subsequent rotation. In this event, the hospital will need to be informed and this will be agreed with the trainee. The trainee will be notified that a second "Unsatisfactory ITA" could result in discontinuation of training on the scheme.

Step 3 – 2nd Formal Meeting in the CAI with the Progression Committee:

Second Unsatisfactory ITA

Where a trainee has received an 'Unsatisfactory' ITA marking in two separate hospitals, the Progression Committee will meet the trainee and advise of possible recommendations to the Training Committee which can include:

• Extended Training Time:

Where it is viewed that the difficulties identified can be corrected within a defined time period of not greater than 12 months, the Progression Committee can propose to the trainee that their programme be extended for a further 12 months. If the trainee is in agreement, this will be presented to the Training Committee for decision. During this time, the matter will be considered as remaining live. If after this extended training time the trainee difficulties previously identified remain, the recommendation of the Progression Committee could be that the trainee should discontinue training on the programme. • Discontinuation from the Programme: Depending on the gravity of the issue, the recommendation of the Progression Committee could be for the trainee to discontinue training on the Programme.

Where the trainee is in agreement with the recommendation of the Progression Committee. a proposal will be brought to the Training Committee for agreement and subsequent implementation.

Where a trainee is not in agreement with the recommendation of the Progression Committee, the recommendation of the Progression Committee is still presented to the Training Committee for a decision by the Training Committee. The Training Committee may determine:

- a) No action is to be taken;
- b) The trainee is to undergo an extension (for a specified period) to their participation on the programme; or
- c) The trainee is to discontinue participation on the Programme.

If, following communication of the decision of the Training Committee, the trainee feels that the decision of the Training Committee regarding their clinical progress is unfair, they have a right to appeal the decision. The appeals process is outlined under <u>Trainee Appeals Process below</u>.

Note:

Where the Progression Committee considers it appropriate to require extended training time, the trainee will be required to fully complete the Programme within a total duration of eight years (excluding leave) from commencement of SAT 1. This eight-year maximum timeframe will include both accredited and unaccredited training time.

Trainee not progressing in line with expectations – Examinations

There are two set milestones in relation to passing of Examinations, the Examination syllabus is available at Appendix 5: Examination Syllabus

Where Exam milestones are not met:

MCAI

Additional 6 months & up to a max of 12 months. If not passed within 12 months Trainee is withdrawn

FCAI

Additional 6 months. Further additional time may be given at the descretion of the Training Committee.

Membership Examination ('MCAI')

The MCAI must be passed in order for a trainee to progress from SAT 2 to SAT 3. In the event that a trainee has not passed the full MCAI, in advance of the trainee's due date for commencing SAT 3, the process will be as follows:

- An additional six-month rotation will be allocated as a SAT 2.5 trainee to facilitate study for the MCAI. Whether the planned rotation will change will be at the discretion of the Directors, taking into account trainee requirements in terms of exampreparation:
 - This six-month period will not be accredited for training;
 - In the event that the trainee passes the MCAI exam in the subsequent six-month period, they will progress to SAT 3 the following January;
- An additional six-month rotation will need to be allocated to enable six year's accredited training to be completed. The location and timing of this allocation will be at the discretion of the Directors, taking into account competencies that need to be completed;
- In the event that the trainee does not pass the MCAI exam within the subsequent six-month period, a second and final six-month period will be provided on the basis outlined above;
- In the event that the trainee passes the MCAI exam in the subsequent six-month period, they will progress to SAT 3 the following July and will require an additional 12 months to be allocated to enable six year's accredited training to be completed. The location and timing of this allocation will be at the discretion of the Directors, taking into account competencies that need to be completed;
- A total holding period of 12 months is the maximum time allowed to enable completion of the MCAI.
 Therefore, in the event that the trainee does not pass the MCAI within the second and final six-month period, their training will be terminated.

Fellowship Examination ('FCAI')

The FCAI must be passed in order for a trainee to progress from SAT 5 to SAT 6. In the event that a trainee has not passed the full FCAI, in advance of the trainee's due date for commencing SAT 6, the process will be as follows:

- An additional six-month rotation will be allocated as a SAT 5.5 trainee to facilitate study for the FCAI. Whether the planned rotation will change will be at the discretion of the Directors, taking into account trainee requirements in terms of exampreparation:
 - This six-month period will not be accredited for training;
 - In the event that the trainee passes the exam in the subsequent six-month period, they will progress to SAT 6 the following January;
- An additional six-month rotation will need to be allocated

to enable six year's accredited training to be completed. The location of this allocation will be at the discretion of the Directors, taking into account competencies that need to be completed;

 In recognition of the circumstances of a trainee who is at this stage of training and who continues to experience difficulties in passing the FCAI, the Training Committee may, at its absolute discretion, allow for a further period of additional training (subject to the provision that that the Programme must be completed within eight years of the trainee's commencement of SAT 1).

Where the trainee feels that the recommendation regarding their examination progress is unfair, they have a right to appeal the decision. The appeals process is outlined under <u>Trainee Appeals Process</u> below.

Exit interview

For trainees completing their SAT 6 year, a formal exit interview will be arranged by the Training Department. The purpose of the review will be to ensure that all training requirements have been completed, all competencies signed off and all Mandatory Training and Simulation courses are completed. In addition, the trainee's feedback on the programme will be sought and their plans post qualification ascertained.

The trainee should bring the following to the interview:

- A summary of their log book;
- A summary of their training diary;
- A summary of their workplace based feedback reports;
- An audit of their non-clinical dayactivity;
- An up to date CV;
- Summary of engagement with reflective practice.

Where the exit interview is considered satisfactory, and all other requirements have been fulfilled, the presiding Director will confirm completion of training.

Trainee Appeals Process

Overview

A trainee can appeal a decision made by the Training Committee with regard to progress of their training

Appeals Process

In the first instance, the trainee can request a review of the decision by the Training Committee, process outlined below:

- Trainee submits a request for a review of the decision in writing to the Chair of the Training Committee within 10 days of notification of the decision;
- The Chair of Training invites the trainee to meet either the full Training Committee or a delegation. The trainee may bring representation which must be notified in

advance (at least five working days' notice);

- The Training Committee or delegation considers the request to review the original decision and brings its deliberations to the full Training Committee which adjudicates on the matter. The outcome of this meeting will be notified to the trainee;
- If the trainee remains dissatisfied with the outcome, they have the right to appeal the outcome to the Appeals Committee of the Council. They should notify the Chairman of the Training Committee, within 10 working days of the decision that they wish to make a formal appeal. The Chairman of the Training Committee will then write to the Secretary of Council informing them that an appeal has been lodged within the specified time limit. This letter will include a summary of the decision and grounds for appeal. The appeal then falls within the remit of the Appeals Committee appointed by Council.

Leave from the Scheme

Leave from the Scheme - "Unaccredited"

The Training Committee has introduced the option for trainees to apply for leave from the scheme at one of two points during their training. There are two opportunities for trainees to apply for unaccredited leave: either at the end of SAT 2, or at the end of SAT 4. The leave options are to facilitate greater flexibility for trainees with a view to promoting wellbeing and to accommodate family and other commitments. It is intended to accommodate a trainee's personal circumstances. Application will be through a formal process and the discretion to grant or refuse leave rests with the Training Committee.

SAT 2 "Unaccredited Leave"

Trainees may apply for leave from the scheme immediately post SAT 2, which is called "Unaccredited Leave". The conditions and eligibility requirements applicable to such leave are as follows:

Requirements:

- Applicants must have successfully completed the MCAI;
- Applications must be submitted on the 'Application for Leave from Training Scheme' form, available on the website, to the Training Department by August 31st for consideration for leave from the following July (see application process below);
- Applications can only be for a 12-month period, i.e. both the minimum and maximum period of leave is 12 months.

Conditions:

 No credit will be given for time out of the programme irrespective of posts held while on leave;

- Trainees must return to the programme after 12 months, otherwise they will be considered to have withdrawn from the programme without a right of re-entry;
- The unaccredited leave option will be available to trainees only once throughout their training programme i.e. if SAT 2 Unaccredited Leave is availed of, then the trainee will not subsequently be granted SAT 4 Unaccredited Leave.

SAT 4 "Unaccredited Leave"

Trainees may apply for leave from the scheme immediately post SAT 4, which is called "Unaccredited Leave". The conditions and eligibility requirements applicable to such leave are as follows:

Requirements:

- Applicants must have successfully completed the FCAI;
- Applications must be submitted on the 'Application for Leave from Training Scheme' form, available on the website, to the Training Department by August 31st for consideration for leave from the following July (see application process below);
- Applications can only be for a 12-month period, i.e. both the minimum and maximum period of leave is 12 months.

Conditions:

- No credit will be given for time out of the programme irrespective of posts held while on leave;
- Trainees must return to the programme after 12 months, otherwise they will be considered to have withdrawn from the programme without a right of re-entry;
- The unaccredited leave option will be available to trainees only once throughout their training programme i.e. if SAT 2 Unaccredited Leave is availed of, then the trainee will not subsequently be granted SAT 4 Unaccredited Leave.

Application Process and Timelines for all unaccredited leave:

- Applications must be submitted on the 'Application for Leave from Training Scheme' form, available on the website, to the Training Department by the August 31st for consideration for the following July;
- All applications will be presented to the Training Committee following the closing date of the end of August for decision at the next subsequent meeting or as soon as practicable;
- Rotations for subsequent years will not be allocated until the leave applications have been considered.
 It is expected that all decisions regarding the leave applications would be made at an October meeting which would allow for rotations to be allocated by mid-November. However, this precise timeline may be

subject to change;

- In determining whether or not to grant a trainee's application for unaccredited leave (either SAT 2 or SAT 4 unaccredited leave), the Training Committee is entitled to take into account the overall number of leave applications (of all types, credited and unaccredited) in a given year. The number of applications granted in any one year will be subject to the College's overarching responsibility with regard to patient safety and resource demands;
- Where it is considered that there are more applications than can be granted for any reason, the Training Committee has the discretion to determine which applications will be granted. In approving applications, the purpose will be taken into account;
- Ultimate decision to grant unaccredited leave is at the discretion of the Training Committee.

Unplanned Leave

In other circumstances where leave is requested on grounds of personal health, well-being or emergency caring responsibilities, it is accepted that the full notice period of 10 months' notice may not be possible. In these circumstances and in the case of any leave request for personal health reasons, appropriate medical or other relevant supporting documentation will be sought.

All requests for leave should be submitted to the Training Department using the 'Application for Leave from Training Scheme' form available on the website.

Leave from the Scheme – Academic

The College supports incorporating research training to PhD level into the SAT Programme. A trainee who is in SAT 3 or higher may apply for academic leave to facilitate completion of a PhD in Ireland. There are two avenues available:

Application through the Wellcome-HRB ICAT Programme ('ICAT')

The ICAT programme recruits candidates on a once-yearly basis through a competitive entry process which opens in September and closes in late October. Eligibility criteria and further information is available on the ICAT website <u>www.icatprogramme.org</u> Trainees who wish to apply for this programme should advise the Training Department of their intention to apply and if successful, must be approved by the Directors of Training in advance of taking up a position on the ICAT Programme.

Funded PhD Programme

It is open to a trainee to independently source funding for a PhD Programme. The College has no involvement in arranging these programmes but will consider applications for leave from the programme where a structured programme is organised through a recognised university in Ireland and once funding has been secured. A trainee may apply to the College for leave to complete an appropriate programme using the 'Application for Leave from Training Scheme' form, available on the website and submission of relevant funding support. Decision to grant leave will be at the discretion of the Training Committee taking into account the trainee's stage of training, ability to complete competencies and gain sufficient experience at senior on-call and the total number of trainees on all forms of leave at that time, in view of the College's overarching responsibility with regard to patient safety and resource demands.

Requirements for Accreditation while on Academic Leave

In either of the situations outlined above and where a trainee is seeking accreditation for the clinical aspect of their programme, the following conditions will apply:

- The maximum period of leave will be three years and the maximum time available for clinical accreditation will be 12 months in a three year academic programme;
- Where the trainee has arranged their own funding, they will need to secure agreement with an appropriate training hospital to complete at least one clinical day per week and one weekend on the on-call rota per 6 weeks. The trainee will then be allocated to a supernumerary post with that hospital and will agree a plan for completing appropriate competencies with the Directors of Training;
- Where a trainee is accepted to the ICAT Programme, the College will arrange the rotations in agreement with an appropriate hospital and the trainee with the requirement to complete at least one clinical day per week and one weekend on the on-call rota per 6 weeks;
- The trainee will then be allocated to a supernumerary post with that hospital and will agree a plan for completing appropriate competencies with the Directors of Training;
- Clinical training during research years must be equivalent to a SAT at the same level of training;
- ITAs should be completed by each hospital for the clinical component of the programme. In addition, a report from the trainee's academic supervisor should be provided on a six monthly basis which should outline trainee's progress in achieving their research goals;
- The trainee will be invited to an annual Progression Review during the time spent on academic leave;
- Accreditation of time towards completion of training will be determined by the Progression Committee;
- The final year of the Programme must be completed on the scheme. Rotations for the final year will be allocated by the Training Department.

Funded Medical Doctorate (MD) Programme

A trainee may have sourced funding for an MD Programme. The College has no involvement in arranging these programmes but will consider applications for leave from the programme where a structured programme is organised through a recognised university in Ireland, and once funding has been secured. Clinical time is not expected to be part of an MD Programme and accordingly no accreditation will be given for any clinical time spent on an MD Programme. Leave for an MD programme will be for no more than two years.

A trainee may apply to the College for leave to complete an appropriate programme using the 'Application for Leave from Training Scheme' form, available on the website. Decision to grant leave will be at the discretion of the Training Committee taking into account the trainee's stage of training and the total number of trainees on all forms of leave at that time, in view of the College's overarching responsibility with regard to patient safety and resource demands.

CAI Post SAT - CSCST Fellowship

An option to complete the final year of training in a sub-specialty Special Interest Year (SIY) has been a part of the programme. The SIY posts were offered by hospitals that had been approved for these posts. These posts will be discontinued after July 2020 and replaced by CAI Post SAT – CSCST Fellowship posts from July 2021. Trainees will have the option to apply to complete an additional year 7 of training in a sub-specialty fellowship. The posts will be available through competitive interview to trainees who have completed the SAT programme. These fellowship posts will be available in a variety of sub-specialty areas of interest which currently include Cardiothoracic Anaesthesia, Intensive Care Medicine, Obstetric Anaesthesia, Onco Anaesthesia, Paediatric Anaesthesia, Paediatric Intensive Care Medicine, Pain Medicine and Regional Anaesthesia. The posts will be limited to 15 CSCST appointments per year. The fellowship allocations may change from year to year based on both hospital and fellowship demand.

The appointment process will be managed by the College. To be eligible, a trainee must have completed the six year SAT Programme and have been confirmed as suitable for award of CSCST by the Directors of Training. The process is outlined below:

- The Training Department will write to eligible trainees during their SAT 6 year and invite expressions of interest;
- Appointments will be made by the Directors of Training on behalf of the Training and Education Committee of the College;

- Where more expressions than available posts are received, a competitive interview process will be held, managed by the Training Department and involving the relevant hospital and or Faculty;
- Supervision and assessment will be carried out by the Training Department, the Faculties and the Hospitals;
- On successful completion of the year the trainee
 will be awarded a CAI Post SAT CSCST Fellowship
 confirming one year's additional training in the relevant
 sub-specialty. In the case of the Dual Specialties,
 the trainee will be awarded a CAI Post SAT CSCST
 Fellowship confirming one year's additional training in
 Pain Management or Intensive Care Medicine.

Less than Full Time Training

National Flexible Training Scheme for Trainees

The College supports the concept of less than full time training. Trainees from SAT year 2 on can apply under the 'HSE National Flexible Training Scheme for Trainees' which is managed and funded by the HSE National Doctors Training and Planning ('HSE NDTP'). The scheme provides for a limited number of supernumerary places to facilitate doctors to continue their training in a flexible manner for a set period of time, currently for a maximum of two years.

Applications are submitted directly to the HSE NDTP. On notification to the College of a successful application, the College will accommodate the trainee by allocating them to the nominated hospital. The impact for the trainee is outlined below:

- The posts should be structured so that flexible trainees benefit from all the essential elements in training i.e. working during normal hours, working outside normal hours (on-call), attendance at tutorials and meetings, study leave etc.;
- Recognition of training time will be in proportion to the hours worked e.g. 12 months working 50% of normal hours in a post will be recognised as equivalent to 6 months full-time training.

Flexible training Initiatives

Flexible training initiatives involving parental leave will be facilitated where feasible and approved by the NDTP.

Trainee Leadership Roles

Trainee Rotas

The CAI recommends that trainees on the CAI training programme work a maximum of a 1 in 6 on-call rota. Trainees have the opportunity to highlight breaches of this recommendation through Progression Reviews and through the Committee of Anaesthesiology Trainees ('CAT') in order to allow the College to address this matter with training sites and to take appropriate action. The role of the rota-maker is an important and valued role within the training site's department and allows the rota-maker to gain useful managerial experience. It also provides them with an insight into the day-to-day running of an Anaesthesiology Department.

It is acknowledged that this role is time consuming and involves interaction at many levels within the department. It is therefore important for both the trainee and the Anaesthesiology Department to have a clear definition of this role and that the responsibilities are clearly understood.

Duties of the Rota-Maker:

- To co-ordinate the allocation of Annual and Educational Leave for Non-Consultant Hospital Doctors ('NCHDs') within the department;
- To seek departmental approval of the draft leave allocations;
- To formulate the on-call rota for the different tiers of NCHD on-call (some of which may be delegated to another appropriate trainee(s) depending on the number of tiers);
- To provide the NCHDs within the department with the on-call rota in a timely fashion and to apportion the number of on-calls as evenly as possible;
- To allocate trainees on a weekly basis to duties in specific areas during normal working hours depending on the nature of the hospital, but normally expected to include: specific theatres, ICU, Pain Medicine, outpatient clinics, labour ward etc.;
- To allocate trainees to their agreed training module;
- To seek departmental approval of the weekly allocation rota.

The rota-maker is NOT responsible for the following:

- Ensuring an individual trainee's working patterns are compatible with completion of modules, this is the responsibility of the tutor;
- Allocating senior trainees to lists perceived to involve either high-risk patients or high-risk surgery;
- Ensuring that a trainee's weekly working hours are compliant with the Organisation of Working Time Act;
- Reduced trainee numbers on a given day due to the release of trainees to attend mandatory educational days at the College;
- Procuring alternative cover for unforeseen absences e.g. sick leave.

Resources for the Rota-Maker:

- The rota-maker should have a nominated consultant whom they can consult regarding any issues pertaining to the rota;
- Any specific issues that other consultants may have with the rota should be addressed directly to the nominated consultant, not the rota-maker;
- All rota-makers, regardless of their stage of training, should be given non-clinical time to do the rota. The amount of time required will vary with the size of the department and the complexity of the rota.

Committee of Anaesthesiology Trainees ('CAT')

The Committee of Anaesthesiology Trainees ('CAT') was established in 2011. The Committee is composed of trainees elected by their peers. The role of the Committee is to give Anaesthesiology Trainees a formal voice and role within the College. They help influence and shape the Specialist Anaesthesiology Training Programme and provide trainee representation on a number of College Committees and external groups and contribute insights that influence the development of anaesthesiology in Ireland.

Lead Anaesthesiology Trainee ('LAT')

The primary role of the LAT is to identify and communicate issues relating to trainees to the relevant person or body (i.e. Clinical Lead, Tutor, NCHD Committee, CAT, or the College). They will also disseminate information to the trainees in their department. The LAT is appointed by and will report to the LAT Coordinator, who is a member of the CAT. The LAT represents all College trainees within the hospital site. Appointment of the LAT needs to be agreed with the tutors in the department. This is not an Industrial Relations role.

Protected Time for Trainees

In line with HSE NDTP requirements the College are now required to develop a process to record protected training time for our trainees.

"Protected training time refers to the time a trainee spends on-site in the hospital that is reserved for training purposes only, with no bleeps or obligations to attend work duties during the training session". Under the Organisation of Working Time Act, trainees are entitled to protected training time and in compliance with HSE regulations, trainees need to be in a position to provide proof of same. In order to capture this information, there is a section in the Training Diary in the e-Portfolio where a trainee can record protected training time. This information will be gathered and used to assist with identifying training sites that fail to deliver protected training time.

Non-Clinical Day – SAT 6 Trainees

The Training Committee recommends that one non-clinical day per week be made available to all SAT 6 trainees provided that the specific use of the non-clinical day is agreed in advance with the tutor or Department Chair, see guidelines for use of the non-clinical day below:

- Participant on CAI mandatory course;
- Faculty on CAI organised courses clinical skills, exam preparation or other approved course;
- Participant, Teacher or Facilitator of hospital based academic activity;
- Agreed Research activity;
- Agreed Audit activity;
- Agreed Clinical guidelines activity;
- Hospital or CAI Management/administrative duties e.g. CAT or LAT.

Application to use non clinical days on a regular basis for a defined research or audit activity should be made in writing to the Department Chair prior to or as early as possible in a rotation. It is noted where at all possible the non-clinical day should be used by trainees for attendance at CAI mandatory courses.

A report on the availability, use and productivity of non-clinical days will be required from each SAT 6 trainee as part of the in-training assessment. This report will form part of their training portfolio and is required at the Exit Interview.

Trainee Review of Hospital Sites

Trainees are asked to take part in a six monthly online survey to review the Hospital sites. The survey is managed by the Training Department, it cannot be accessed by the hospitals and it is not available to view by anyone other than the trainee and the Training Department. The information gathered is anonymised and used as part of the hospital inspection process. The information does provide valuable information for the College and the hospitals in seeking to make improvements for trainees and to the training programme. The survey results are monitored by the Training Department and will be used to manage any training issues within hospitals which may need to be resolved. They also offer additional insight into the condition of a training site during the accreditation inspection process.

Guidelines for Tutors

Introduction

Tutors are the College's representatives in accredited training hospitals. They are the primary link between the trainees, the hospital site and the College. They are responsible for the organisation of training activity at the training site, ongoing monitoring of trainees' progress and ultimate assessment of trainees at the end of each rotation.

Role of Consultants as Trainers:

While the tutor has primary responsibility for the organisation of training at the hospital site, all consultants coming into contact with trainees are considered trainers. To be recognised as a trainer by the College, a consultant must:

- Hold the Fellowship of the College or equivalent;
- Be 'In Good Standing' with the College;
- Be registered on the Specialist Division of the Register for Anaesthesiology with the Medical Council of Ireland;
- Be registered on and compliant with a Medical Council accredited Professional Competence Scheme ('PCS');
- Be employed in a hospital that has been inspected and accredited by the College.

All consultants acting as CAI Trainers have a responsibility to:

- Allow trainees to gain experience under supervision;
- Help and support trainees using the prescribed workplace based feedback tools;
- Assist trainees to achieve their goals in the areas of knowledge, experience, competency and professionalism;
- Provide ongoing feedback to tutors and contribute to end of rotation In-Training Assessment process;
- Contribute to the hospital and College teaching and examination programmes;
- Adhere to all HSE and College Policies.

Appointment of Tutors:

To be eligible for nomination as a tutor, a doctor must meet the following criteria:

- Hold the Fellowship of the College or equivalent;
- Be 'In Good Standing' with the College;
- Be registered on the Specialist Division of the Register for Anaesthesiology with the Medical Council of Ireland;
- Be registered on and compliant with a Medical Council accredited PCS;
- Be employed as a permanent consultant at an inspected and accredited training site.

The Chair of the Department at an accredited training site nominates a proposed tutor to the Training Department of the College. The Training Manager tables the nomination for consideration at the next meeting of the Training Committee:

• The Training Committee reserves the right of approval

of tutor appointments in its sole and absolute discretion. In the event, that the Training Committee does not approve a nomination, the Anaesthesiology Department may propose an alternative nominee;

 A tutor is appointed for an initial term of three years. The Training Department maintains a log of tutor Appointments and reviews this annually to establish if a three-year term is due to expire. The Department Chair should be contacted to confirm extension of term or to propose a new nominee

The College recommends that one tutor should be appointed for every eight trainees at a minimum. Where there are less than eight trainees, it is advisable to appoint a second tutor to cover leave / absence.

Duties of Tutors:

The principal duties of the tutor are outlined below:

- On allocation of trainees to hospital sites:
 - On receipt of notification from the College the tutor should contact each trainee to establish initial preferences regarding modules, on-call requirements, examinations and course requirements;
 - The tutor reviews preferences and appoints the rota maker;
 - The tutor is responsible for releasing trainees to attend mandatory courses and examinations as part of the Training Programme. A trainee should not be expected to attend a Mandatory Training or Simulation course if they are post-call;
 - The tutor is responsible for releasing SAT 6 trainees for non-clinical day;
- The tutor should identify who is the appointed Lead Anaesthesiology Trainee ('LAT') and ensure that the Anaesthesiology Department is aware of the appointment. Where the Anaesthesiology Department considers that the LAT appointment may not be appropriate, e.g. in terms of seniority or experience, the tutor should refer this to the Training Department;
- The tutor should be familiar with curriculum requirements, training guidelines and examination regulations;
- The tutor should be familiar with all electronic processes for trainee management, e.g. log books, training diary and assessment tools;
- The tutor is primarily responsible for the in-hospital training, including teaching, presentations, access to modules and competencies;
- The tutor is primarily responsible for monitoring trainees:
 - Meeting trainees at the start of the rotation to agree goals and objectives;
 - Meeting trainees in the middle of the six months' rotation to provide the opportunity for one-to-one meetings to gauge progress, provide feedback and take remedial action if required;
 - Arranging end of rotation meeting.

- The tutor should brief a departmental meeting with an overview of the objectives agreed for all trainees;
- The tutor should keep the Training Department informed of relevant developments that may influence trainee's performance and wellbeing;
- The tutor is primarily responsible for the Trainee Assessment process. Full details are outlined under_ <u>The Assessment Process</u> in the 'Requirements for Trainees' section above.
- The tutor should attend the CAI Annual Tutor Training Day, ideally each year but at a minimum should attend twice in the three years of their appointment. Attendance will be reviewed on renewal of tutor appointment.

Lead Tutor:

The network of Anaesthesiology Tutors throughout the training hospitals is represented at the Training Committee by the Lead Tutor. The Lead Tutor should be selected by the Anaesthesiology Tutors across the training hospitals from among their number. Tutors should avail of the Lead Tutor to keep the Training Committee informed of relevant matters and to highlight any matters in relation to anaesthesiology training that require attention and to recommend improvements for consideration.

Each geographical region is represented at the Training Committee, ideally by two tutors from each Region. Appointment of the regional representatives is co-ordinated by the Lead Tutor in conjunction with the Training Manager.

Duties of the College:

The College has a responsibility to ensure that tutors are equipped to carry out their role. In this regard, the College undertakes to:

- Provide appropriate information to tutors on appointment;
- Provide access to relevant electronic facilities, e.g. Assessment tools, competency sign off;
- Hold a tutor training / information day at least annually;
- Be available for one-to one meetings, if required, as a means of orientation for new tutors;
- Invite tutors to participate in working groups as appropriate, e.g. where key change to current practice is under consideration;
- Provide appropriate Continuing Professional Development ('CPD') points for tutor / trainee educational activity, as a guide 1.5 hours per trainee per six month period and a further 6 points for the Tutor Day.

Note:

The College has begun the process of placing educational material on a digital hub. See <u>Appendix 7:</u> <u>CAI Competency Framework Hub</u>

CAI Educational Fund:

The College provides funding for training and educational purposes of €3,000 per tutor and up to a maximum of €9,000 per hospital in any 3-year period. The funding can be claimed over a 3-year period, e.g. €3,000 from Jan 2020 to Dec 2022 and again from Jan 2023 to Dec 2025. The funding is principally for equipment / events with an educational / training purpose which can include wellbeing / team building. The fund is to reimburse the Anaesthesiology Department for expenditure of this nature. Criteria and the application process are available on the website at Tutor Guidelines.

Responsibilities of Anaesthesiology Departments:

The role of the tutor is ongoing and it is critical that the Department at the accredited training site supports the tutor in carrying out their duties. The College recommends that the Anaesthesiology Department provides appropriate support, including:

- Access to private space for meeting with trainees;
- Access to administrative assistance and office equipment as appropriate;
- Releasing tutors for one day per year from clinical / associated duties to attend College organised Tutor Training Day;
- Making available protected time. It is expected that tutors will need, at a minimum, the equivalent of 6 working days throughout a six-month rotation, allowing time at the critical start, middle and end periods for appropriate engagement with trainees.

Guidelines for Hospital Accreditation

The College of Anaesthesiologists of Ireland ('CAI') is mandated as a national training body under the auspices of the Medical Council of Ireland ('Medical Council') to inspect and accredit all sites involved in the training of its specialist anaesthesiologist trainees. This is done on a five yearly basis. Specialist Anaesthesiology Training for the awarding of a Certificate of Satisfactory Completion of Specialist Training ('CSCST') from the CAI, may only be undertaken in training sites which are accredited for training by the CAI. The main aim of the accreditation process is to ensure high quality training for CAI trainees. The Guidelines for Hospital Accreditation are available in Appendix 4: Hospital Accreditation, along with a table of accredited units for each hospital.

PART B: Clinical Components



Part B: Clinical Components

Guide to the Clinical Components of the Curriculum

The clinical components of the Curriculum are subdivided into three domains, Core Competency, Modular and Specialty Modular. Within each domain there are several units.

Core Competency units

There are 8 Core Competency units. These are considered fundamental knowledge and skills applicable across all areas of practice. These clinical components comprise a collection of competencies appropriate for developing the skills of a junior trainee to safely anaesthetise, under distant supervision, a patient with moderate complexity. These skills are developed throughout training and thus revisited throughout the training programme.

Modular units

There are 9 Modular units. These identify clinical areas requiring further specialised knowledge and skills to manage patients in specific contexts. These modules should be completed as a minimum of one month assigned to each sub-specialty area.

Specialty Modular units

There are 4 Specialty Modular units. These have been further delineated as modular units requiring a longer dedicated period in a sub or dual specialty area to consolidate learning.

Format of the Curriculum

Each Unit is structured with a:

- 1) Title of the Unit;
- 2) Description of the learning outcomes for each of the competencies within the unit.

The table is structured as follows:

| Ref | Medical | K/S/A | Expected | Assessment |
|-----|---------|-------|----------|------------|
| | Domain | | standard | method |

The Reference Code (Ref) is formatted as follows:

- Initial two letters identify the specific competency, which is further elaborated below;
- The middle letter identifies the competency as either a core competency unit (C), a modular unit (M), or a specialty modular unit (S);
- The end number refers to the expected standard.

Core Competency units

Peri-operative Management: PA_C_

Airway Management: AM_C_

General Anaesthesia for ASA I and II Patients for Low Risk Surgical Procedures: GA_C_

Regional Anaesthesia (i) – Neuraxial and Foundation Peripheral Nerve Blockade: RN_C_

Anaesthesia for Ambulatory Surgery: AA_C_

Anaesthesia for Orthopaedic Surgery: OR_C_

Trauma Management: TR_C_

Transfer of the Critically Unwell Patient: TF_C_

Modular units

Anaesthesia for General, Urological & Gynaecological Surgery: GA_M_

Anaesthesia for Plastic and Reconstructive Surgery, including Burns: PB_M_

Anaesthesia Outside of the Operating Theatre including conscious sedation: AO M

Regional Anaesthesia (ii) – Peripheral Nerve Blockade: RP_M_

Anaesthesia for Otolaryngology, Oral and Maxillofacial, Head and Neck Surgery: EN_M

Anaesthesia for Vascular Surgery: VA_M_

Anaesthesia for Neurosurgery and Neuroradiology: NR_M_

Anaesthesia for Cardiac and Thoracic Surgery: CT_M_

Specialty Modular units

Anaesthesia and Analgesia for Obstetric Care: OB_S_

Anaesthesia for Paediatric Surgery: PA_S_

Intensive Care Medicine: CC_S_

Pain Medicine: PM_S_

The Medical Domain is a numerical number associated with each of the Medical Domains, as mentioned in the Medical Council's Eight Domains of Professional Practice.

- 1. Patient Safety and Quality of Care SALUS
- 2. Relating to Patients
- 3. Communication and Interpersonal Skills
- 4. Collaboration and Teamwork
- 5. Management (including self-management)
- 6. Scholarship
- 7. Professionalism
- 8. Clinical Skills

K/S/A Denotes the attribute tested by the Expected Standard in the unit, which relates to either knowledge, skill, or attitude.

The **expected standard** is a short statement outlining the specific learning objective required.

The expected standard can be defined according to knowledge, skills and attitudes/behaviours. Each standard has a descriptor which can be assessed by a specified assessment method.

The **Assessment strategy** supporting the curriculum includes a number of formative and summative methods for assessment of each expected standard. There may be more than one method suitable for assessing an expected standard. However, only one method has been used in the curriculum.

Workplace based assessments include:

- IAC: Initial Assessment of Competence
- CBD: case based discussion (review of a selected clinical case or an aspect of patient care)
- DOPS: direct observation of procedural skills (performing a specific clinical procedure)
- Mini-CEX: mini clinical evaluation exercise (performing a focused clinical activity during a specific patient encounter)

A description of Workplace Based Assessments and the template available on the e-Portfolio can be accessed in <u>Appendix 3: Workplace Based Assessments</u>

Summative assessment methods include

- MCAI: Membership examination
- FCAI: Fellowship examination

A Link to the syllabus for the examinations can be accessed in <u>Appendix 5: Examination Syllabus</u>

Each document ends with a table of recommendations:

- Volume of Practice (VOP) Summary of logbook entries for each procedure. Guidelines for volumes of practice are formulated as minimum recommendations. The minimum volume of practice does not reflect the importance of the type of procedure or estimate the number of cases required to achieve competence. Variances in local practices and individual learning necessitate that volume of practice be one component in a range of assessment strategies, see <u>Appendix 2: Summary of Minimum Criteria for</u> <u>Competence</u>
- 2) Workplace Based Assessments ('WBA/s') These guidelines will evolve, but as a starting recommendation a SAT 1-2 trainee should participate in 5 WBA per 6 month training period, SAT 3-6: 4 WBA per 6 month training period, with an overall requirement of 52 over the six year training programme. Each unit has a number of WBA to select from, not all of which are mandatory. See <u>Appendix 2:</u> <u>Summary of Minimum Criteria for Competence</u>
- 3) **Recommended courses and simulation sessions** are highlighted, as well as optional courses available.

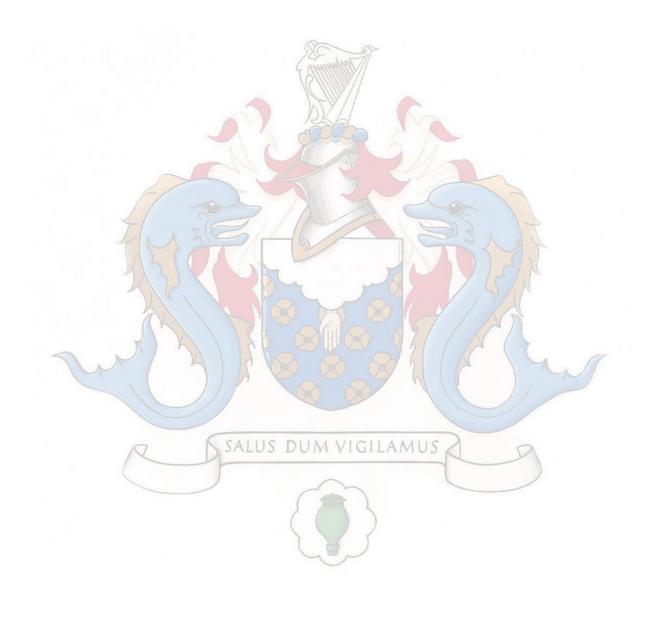
Trainee Progression through a Unit

For the trainee to have achieved completion of a unit, i.e. to be signed off on a competency, the following criteria must be met:

- The time based experience for the module, where specified, needs to be completed;
- The trainee needs to provide evidence of having recorded the recommended minimum volume of practice requirements relating to that unit;
- The trainee needs to participate in a specified number of workplace based assessments comprising DOPS, CBD and Mini-CEX. These workplace based assessments do not currently form a mandatory part of the trainee's progress through a unit, but in keeping with the move towards competency based education, CAI recommends an adherence effort to achieve the numbers of assessments as laid out in this Curriculum. Workplace based assessments should be learning experiences identified by the trainee as opportunities to gain formative feedback to improve their performance and progress towards independent practice;
- There are a number of mandatory training courses, simulation and recommended courses for given competencies, as outlined in <u>Appendix 6: Courses</u>.



Section Three: Core Competency Units



Peri-operative Management

Description:

At the end of training, the trainee will be able to provide perioperative care for patients with significant co-morbidities, including pre-operative assessment and risk stratification, preparation and optimisation prior to surgery, and plan for early postoperative care to minimise potential harmful consequences of surgery.

| | Domain | KSA | Expected Standards | Assessment |
|--------|--------|-----|---|------------|
| | | | HISTORY TAKING | |
| PA_C_1 | 2,3 | А | Communicates in a satisfactory manner with the patient | Mini-CEX |
| PA_C_2 | 2 | S | Obtains a relevant history Recognises the importance of different elements of history Recognises that patients do not always present history in a structured fashion Knows the likely causes and risk factors for conditions relevant to mode of presentation Recognises that the patient's concerns and the history should inform examination, investigation and management | Mini-CEX |
| PA_C_3 | 2.3 | S | Demonstrates satisfactory proficiency in obtaining a history specifically relevant to the planned anaesthesia and surgery including: A history of the presenting complaint for surgery A systematic comprehensive relevant medical history | IAC |
| PA_C_4 | 6 | К | Gives examples of how common co-existing diseases affect anaesthetic management and perioperative risk | MCAI |
| PA_C_5 | 4,7,8 | S | Understands the severity and stability of the disease, and outlines appropriate management or referral for consultation with other specialities to optimise the patient for surgery Cardiovascular Hypertension Ischaemic heart disease Cardiomyopathy Arrhythmias, Heart blocks Congestive Cardiac Failure Implantable devices: pacemakers, AICD (automated implantable cardioverter defibrillator), valve disease Respiratory COPD (chronic obstructive pulmonary disease), Asthma, OSA (obstructive sleep apnoea) Metabolic/Endocrine Diabetes Mellitus, Epilepsy, Arthritis Electrolyte disorders Obesity Thyroid disease Steroid use Haematological/Immunological Therapeutic anticoagulation, including bridging Inherited bleeding disorders: sickle cell, vWillebrands Gastrointestinal Hiatus hernia, GORD (gastro-oesophageal reflux disease) Renal Infectious Disease Psychiatric/Behavioural disease | FCAI |

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|--|------------|
| | | | HISTORY TAKING CONTINUED | |
| PA_C_5 | 4,7,8 | S | Neurological Epilepsy Paraplegia, stroke Parkinson's disease Multiple sclerosis Musculoskeletal Disease Rheumatoid arthritis Myotonic dystrophies Myasthenia gravis Frailty Cancer | FCAI |
| PA_C_6 | 2,3 | S | Obtains information about current and past medication | IAC |
| PA_C_7 | 2,8 | S | Obtains a history of allergy and intolerance | IAC |
| PA_C_8 | 2,3,8 | S | Obtains information about previous anaesthetics and relevant family history | IAC |
| | | | CLINICAL EXAMINATION | |
| PA_C_9 | 8 | S | Demonstrates satisfactory proficiency in performing a relevant clinical examination including when appropriate: Cardiovascular system Respiratory system Central and peripheral nervous system: GCS (Glasgow Coma Scale), peripheral deficit Musculoskeletal system: patient positioning, neck stability/movement, anatomy for regional blockade Other: nutrition, anaemia, jaundice | DOPS |
| PA_C_10 | 6 | К | Explains the basis for clinical signs and the relevance of positive and negative physical signs | MCAI |
| PA_C_11 | 8 | S | Performs a focused airway assessment Assesses dentition Assesses Mallampati, mouth opening, TM (thyro-mental) distance, neck mobility Predicts difficult BMV (bag mask ventilation) Predicts potential difficult airway | IAC |
| PA_C_12 | 8 | К | Explains the relevance of clinical data including, but not exclusively: Clinical parameters such as: Blood Pressure, Pulse, CVP (central venous pressure) Body Mass Index ('BMI') Fluid balance X-rays, computerised tomography ('CT') scan | MCAI |
| PA_C_13 SALUS | 1 | S | Reviews patient clinical case notes and associated records | CBD |
| | | | INVESTIGATIONS | |
| PA_C_14 | 6 | к | Explains the indications for and interpretation of preoperative investigations such as: ECGs (Electrocardiograms) Echocardiography and stress testing Pulmonary function tests | MCAI |

| | Domain | KSA | Expected Standards | Assessment |
|---------------------------|--------|-------|--|------------|
| | | | INVESTIGATIONS CONTINUED | |
| PA_C_15 | 6 | S | Explains the indications for and interpretation of clinical laboratory data including: Haematology Biochemistry: Urea and electrolytes; liver function; thyroid function Arterial blood gases/acid-base balance | MCAI |
| PA_C_16 | 6,8 | S | Identifies normal appearances and significant abnormalities in radiographs including: Chest X-rays Trauma films – cervical spine, chest, pelvis, long bones Head CT showing clear abnormalities | DOPS |
| PA_C_17 | 4,6 | S | Recognises the need for additional work-ups and acts accordingly | MCAI |
| | | | SPECIFIC ANAESTHETIC EVALUATION | |
| PA_C_18 | 6,8 | K,S | Describes ASA status and implications for anaesthesia Knows how to assign ASA status to a patient Explains how emergency and elective surgery differ in terms of physiology, psychology and preparation | MCAI |
| PA_C_19 | 6,8 | S,K | Uses functional and risk scoring system systems such as NCEPOD*, STOP BANG, P-POSSUM, Duke Activity Score, Revised cardiac index, or other relevant tools to quantify patient risk and inform consent and peri-operative management * National confidential enquiry into patient outcome and death | FCAI |
| | | | PERI-OPERATIVE PLANNING | |
| PA_C_20 <mark> </mark> | 1,2,5 | K,S,A | The candidate will demonstrate the ability: to establish a problem list to judge whether the patient is fit for and optimally prepared for the proposed intervention to manage co-existing medicines in the perioperative period to plan anaesthesia and postoperative care for common surgical procedures to recognise their limitations and reliably determine the level of supervision they will need to explain options and risks of routine anaesthesia to patients, in a way they understand, and obtain their consent for anaesthesia | Mini-CEX |
| PA_C_21 SALUS | 1,6 | К | Identifies the principles of consent for surgery and anaesthesia, including the issue of competence | MCAI |
| PA_C_22 | 1,2 | K,S | Outlines the particular importance of considering the patient's level of understanding and mental state [and also that of the parents, relatives or carers when appropriate] and how this may impair their capacity for consent | MCAI |
| PA_C_23 | 2,3 | S | Presents all information to patients [and carers] in a format they understand, checking understanding and allowing time for reflection on the decision to give consent | Mini-CEX |
| PA_C_24 | 2,3 | К | Describes how consent is a process that may culminate in, but is not limited to, the completion of a consent form | MCAI |
| PA_C_25 | 2,3 | К | Describes the Surgical Care pathways Demonstrates knowledge of: Enhanced recovery programmes Role of prehabilitation Role of nutrition on outcomes | FCAI |

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-------|---|------------|
| | | | PERI-OPERATIVE PLANNING CONTINUED | |
| PA_C_26 | 6 | К | Lists basic indications for prescription of premedication drugs | MCAI |
| PA_C_27 | 6 | К | Discusses the use of peri-operative medications in connection with anaesthesia and surgery | MCAI |
| PA_C_28 | 6,8 | S | Explains the need to prescribe premedication as and when indicated, especially for the high risk population | MCAI |
| PA_C_29 | 2,6,8 | K,S,A | Anxiolysis and sedation Summarises the value of appropriate explanations and reassurance in alleviating the patients anxiety Explains, in a way the patient understands, the benefits and possible risks of sedative premedication Outlines how to select and prescribe appropriate anxiolytic/sedative premedication when indicated | MCAI |
| PA_C_30 | 6 | K,S | Risk of aspiration Lists the indications for preoperative fasting and understand appropriate regimens Lists the factors that influence the risk of patients at increased risk of gastric reflux/aspiration and understands strategies to reduce it Describes the applied pharmacology of pro-kinetic and antacids including simple alkalis, H2 and Proton Pump antagonists Describes how to select and prescribe appropriate agents to reduce the risk of regurgitation and aspiration, in time frame available | MCAI |
| PA_C_31 | 6 | K,S | Risk of venous thrombo-embolism Discusses local/national guidelines on management of thrombo-embolic risk and how to apply them Explains the available methods to minimise the risk of thrombo-embolic disease following surgery | MCAI |
| PA_C_32 | 6 | К | Antimicrobial prophylaxis Explains the principles and practice of using prophylactic antibiotics | MCAI |
| PA_C_33 | 6 | К | Discusses how to manage drug therapy for co-existing disease in the perioperative period including, but not exclusively: obesity; diabetic treatment; corticosteroids; anticoagulants; cardiovascular medication; epilepsy treatment | MCAI |
| PA_C_34 | 6 | К | Discusses the implications/rationale for withholding or continuing regular medications | MCAI |
| PA_C_35 | 6 | К | Discusses the use of illicit drugs, pharmacology, and the implications for anaesthesia | MCAI |
| PA_C_36 | 6,8 | S | Formulates a procedural plan with contingencies Includes planning for vascular access, airway maintenance, use of blood products | Mini-CEX |
| PA_C_37 | 1,6 | К | Discusses the indications for RSI (rapid sequence induction) | IAC |
| PA_C_38 | 4,6 | S | Describes an airway management plan | CBD |
| PA_C_39 | 6 | К | Discusses the complications of anaesthetic drugs and how to predict patients who are at increased risk of these complications including anaphylaxis, suxamethonium apnoea and malignant hyperpyrexia | MCAI |

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-----|---|------------|
| | | | DESCRIBES POST-OPERATIVE PLAN | |
| PA_C_40 | 5,8 | S | Describes a balanced view of all care options | CBD |
| PA_C_41 | 6 | К | Outlines the factors determining a patient's suitability for treatment as an ambulant patient | FCAI |
| PA_C_42 | 6 | S | Explains which patients require monitored post-operative care | CBD |
| PA_C_43 | 6 | К | Recalls/lists the factors that affect the risk of a patient suffering PONV (post-operative nausea and vomiting) | MCAI |

| Volume of Practice | Volume of Practice | | | | |
|---|--------------------|--|--|--|--|
| Pre-operative assessment Clinics Post-operative round (PACU/HDU) Acute pain round Total minimum VOP: | | | | | |
| Workplace Based Assessments | | | | | |
| Required Workplace based assessment | | | | | |
| Available WBAs CBD: DOPS: Mini-CEX: | | | | | |

Airway Management

Description:

Managing the airway is a core anaesthetic skill. The trainee is expected to know the relevant functional anatomy of the airway, be familiar with airway devices and adjuncts, be able to maintain airway patency, support the deteriorating airway and have an airway management strategy for the anticipated and unanticipated difficult airway.

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|--|------------|
| | | | PRE-INDUCTION | |
| AM_C_1 | 6 | К | Knows the relevant functional anatomy of the upper airway | MCAI |
| AM_C_2 | 1 | К | Knows the predictors of difficult bag mask ventilation | MCAI |
| AM_C_3 | 1 | К | Knows the predictors of difficult intubation | MCAI |
| AM_C_4 | 1 | S | Can identify the predictors of difficult bag mask ventilation and/or difficult intubation | CBD |
| AM_C_5 | 6 | К | Describes the fasting guidelines | MCAI |
| AM_C_6 SALUS | 1 | К | Discusses factors that contribute to risk of regurgitation and pulmonary aspiration | MCAI |
| AM_C_7 | 1 | К | Describes the measures to reduce the risk of regurgitation and pulmonary aspiration | MCAI |
| AM_C_8 | 4 | А | Formulates and outlines an airway management strategy | CBD |
| AM_C_9 | 6 | к | Explains the principles of effective pre-oxygenation | CBD |
| AM_C_10 | 8 | S | Performs effective pre-oxygenation | IAC |
| AM_C_11 SALUS | 1 | К | Describes the principles of airway management for patients with tracheostomy | CBD |
| AM_C_12 | 6 | К | Describes how to perform manual in-line stabilisation | MCAI |
| AM_C_13 | 8 | S | Demonstrates manual in-line stabilisation | DOPS |
| | | | AIRWAY PATENCY | |
| AM_C_14 | 1 | К | Describes the signs and symptoms of an obstructed airway | CBD |
| AM_C_15 | 3 | S | Knows how to manage the obstructed airway and can demonstrate airway manoeuvres to ensure/restore airway patency | DOPS |
| AM_C_16 | 8 | к | Demonstrates airway manoeuvres to ensure/restore airway patency | IAC |
| AM_C_17 | 8 | к | Can choose and insert an appropriate airway adjunct | DOPS |
| AM_C_18 | 8 | S | Performs effective bag mask ventilation | IAC |

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|---|------------|
| | | | IN RESPECT OF SUPRAGLOTTIC AIRWAY DEVICE | |
| AM_C_19 SALUS | 1 | К | Can list the indications and contraindications for the use of supraglottic airway devices | MCAI |
| AM_C_20 | 8 | S | Can insert a supraglottic airway device with contingencies | DOPS |
| AM_C_21 | 6 | S | Demonstrates and confirms correct placement of a supraglottic airway device | DOPS |
| | | | IN RESPECT OF TRACHEAL INTUBATION | |
| AM_C_22 | 6 | К | Describes the indications for tracheal intubation | MCAI |
| AM_C_23 | 1 | К | Discusses the risks associated with tracheal intubation (dental risks, risks associated with positive pressure ventilation, inadvertent oesophageal/endobronchial intubation) | MCAI |
| AM_C_24 | 6 | К | Outlines the main types of endotracheal tubes and can identify their applications | MCAI |
| AM_C_25 | 6 | К | Shows how to choose the correct size and length of endotracheal tubes | DOPS |
| AM_C_26 | 6 | К | Describes the different types of laryngoscopes and blades | MCAI |
| AM_C_27 | 6 | К | Describes the grade the direct laryngoscopy view (Cormack and Lehane) | CBD |
| AM_C_28 | 8 | S | Can perform oral intubation | IAC |
| AM_C_29 | 8 | S | Can describe how to perform nasal intubation | CBD |
| AM_C_30 | 8 | S | Describes the use of the bougie and stylet | CBD |
| AM_C_31 | 6 | S | Can demonstrate confirmation of correct placement of endotracheal tube | DOPS |
| AM_C_32 | 6 | К | Understands the principles of and can perform rapid sequence induction | IAC |
| AM_C_33 | 1 | К | Discusses the Difficult Airways Society ('DAS') +/- other recognised difficult airway guidelines | CBD |
| AM_C_34 | 6 | К | Demonstrates use of videolaryngoscopes | DOPS |
| AM_C_35 | 6 | S | Is able to identify the patient requiring awake fibreoptic intubation Is able to perform awake fibreoptic intubation | Mini-CEX |
| AM_C_36 | 8 | S | Can describe the management of the anticipated difficult airway as per DAS or other recognised guidelines | MCAI |
| AM_C_37 | 8 | S | Can describe the management of the unanticipated difficult airway as per DAS or other recognised guidelines | CBD |

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-----|--|------------|
| | | | DURING EMERGENCE AND POSTOPERATIVELY | |
| AM_C_38 | 6 | К | Can list the indications of oxygen therapy | MCAI |
| AM_C_39 | 1 | К | Discusses the differential diagnoses and management of desaturation during and after general anaesthesia | CBD |
| AM_C_40 | 1 | К | Describes the causes and management of stridor | MCAI |
| AM_C_41 | 8 | S | Outlines the recognition and management of stridor | CBD |
| AM_C_42 | 6 | К | Outlines the performance characteristics of available oxygen delivery devices | MCAI |

| Volume of Practice | | | | |
|--|------------------------------|--|--|--|
| Bag-Mask Ventilation Supraglottic Airway Endotracheal Intubation Nasal intubation Video Laryngoscopy Fibreoptic intubation Total minimum VOP: | | 30 30 5 10 5 110 | | |
| Workplace Based Assessments | | | | |
| Required Workplace based assessment | | 2 | | |
| Available WBAs | CBD: DOPS: Mini-CEX: | 12 8 1 | | |
| Courses | | | | |
| Simulation A-Crisis | | | | |
| Course | Difficult Airways Management | | | |

General Anaesthesia for ASA I-II Patients for Low-risk Surgical Procedures

Description:

Providing general anaesthesia is a core anaesthetic skill. This unit deals with basic knowledge and skills to provide general anaesthesia in low-risk patients (ASA I,II) having low-risk surgical procedures (surgical severity of 1 and 2).

| | Domain | KSA | Expected Standards | Assessment |
|--------------------------------|--------|-----|--|------------|
| | | | PRIOR TO INDUCTION | |
| GA_C_1 | 6 | К | Outlines the basic pharmacology of the main groups of drugs required for anaesthesia including but not limited to: Sedatives Intravenous and inhalational anaesthetic agents Analgesics Antiemetics NMBAs (Neuro muscular blocking agents) Reversal agents Emergency drugs used in anaesthesia | MCAI |
| GA_C_2 | 6 | К | Describes the ASA physical status classification system and its implications for anaesthesia | MCAI |
| GA_C_3 | 5 | К | Outlines the indications for common perioperative investigations | MCAI |
| GA_C_4 | 5 | S | Conducts a relevant assessment (targeted history and focused examination) of the patient prior to anaesthesia and/or reviews the findings of the pre-assessment of the patient, to identify features that will affect perioperative anaesthetic management | DOPS |
| GA_C_5 | 1 | S | Outlines a pre-, intra- and postoperative management plan | CBD |
| GA_C_6 SALUS | 1 | S | Properly prepares the anaesthetic room and/or operating theatre | IAC |
| GA_C_7 SALUS | 1 | S | Conducts a pre-operative equipment check, as per AA (Association of Anaesthetists) guidelines | IAC |
| GA_C_8 SALUS | 1 | S | Prepares the required drugs, including emergency drugs | IAC |
| GA_C_9 | 2 | К | Discusses the elements of informed consent | CBD |
| GA_C_10 <mark>(SALUS</mark> | 1 | К | Outlines preoperative fasting guidelines, identifies patients at risk of pulmonary aspiration of gastric contents and discusses perioperative measures to reduce the risk of same | MCAI |
| GA_C_11 | 2 | А | Manages patient anxiety | Mini-CEX |
| GA_C_12 | 2 | А | Chooses an appropriate anaesthetic technique, discusses the anaesthetic plan with the patient and the alternate options for anaesthesia | Mini-CEX |
| GA_C_13 | 3 | А | Identifies and communicates with anaesthetic nurse/assistant | DOPS |
| GA_C_14 | 8 | К | Formulates and describes an appropriate airway management strategy | CBD |
| GA_C_15 | 8 | S | Establishes intravenous access | DOPS |

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|---|------------|
| | | | PRIOR TO INDUCTION CONTINUED | |
| GA_C_16 | 1 | S | Ensures that standard mandatory monitoring is applied | IAC |
| GA_C_17 SALUS | 1 | К | Participates in and/or initiates the Surgical Safety Checklist according to local protocol | IAC |
| | | | INDUCTION OF GENERAL ANAESTHESIA | |
| GA_C_18 | 1 | S | Achieves optimal positioning prior to induction | IAC |
| GA_C_19 | 8 | S | Conducts effective pre-oxygenation | IAC |
| GA_C_20 | 8 | к | Selects appropriate drugs and dose for induction of anaesthesia | DOPS |
| GA_C_21 | 8 | S | Recognises when satisfactory anaesthesia has been achieved | IAC |
| GA_C_22 | 8 | К | Anticipates and addresses changes in cardiovascular stability brought on with induction/ventilation | DOPS |
| GA_C_23 | 8 | S | Maintains airway patency during induction (manoeuvres, airway adjunct as needed) | IAC |
| GA_C_24 | 8 | К | Chooses an appropriate size and type of airway device | DOPS |
| GA_C_25 | 8 | S | Demonstrates appropriate technique for airway device insertion | IAC |
| GA_C_26 | 8 | S | Ascertains correct placement of airway device and efficacy of ventilation with contingencies | IAC |
| | | | MAINTENANCE OF GENERAL ANAESTHESIA | |
| GA_C_27 SALUS | 1 | К | Ensures safe patient positioning for surgery | DOPS |
| GA_C_28 | 1 | К | Describes the physiological changes that occur with and implications for anaesthetic management of the following patient positions: Supine Trendelenburg Reverse Trendelenburg Lateral Lithotomy Prone | MCAI |
| GA_C_29 SALUS | 1 | К | Maintains anaesthesia and monitors patient satisfactorily | DOPS |
| GA_C_30 | 7 | S | Maintains a tidy/safe work place Keeps an appropriate and legible anaesthetic record Ensures electronic records are accurate and appropriately signed off | Mini-CEX |
| GA_C_31 SALUS | 1 | S | Outlines the recognition of emergencies and knows when to call for help/ support | CBD |
| | | | EMERGENCE FROM GENERAL ANAESTHESIA | |
| GA_C_32 | 8 | S | Anticipates and prepares for emergence and manages extubation and common complications during emergence | DOPS |

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|--|------------|
| | | | POST-ANAESTHESIA CARE UNIT ('PACU') | |
| GA_C_33 | 8 | S | Safely transfers patient to the PACU | DOPS |
| GA_C_34 | 8 | A | Demonstrates safe handover of patient care during and after anaesthesia Ensures appropriate documentation in patient health care records for handover and continuation of patient care | DOPS |
| GA_C_35 | 8 | К | Outlines appropriate postoperative analgesia, anti-emesis, fluid regime, oxygen therapy | MCAI |
| GA_C_36 SALUS | 1 | S | Outlines the management of common problems in the PACU including: Hypotension Hypertension Tachycardia Bradycardia Postoperative nausea and vomiting Severe pain | FCAI |
| GA_C_37 | 1 | К | Explains the criteria for patient discharge from PACU | MCAI |
| GA_C_38 | 1 | S | Outlines principles of reviewing a patient on the ward for the patient with anaesthetic or surgical concerns | CBD |

| Volume of Practice | | | | | | | |
|-------------------------------------|-----------------------------|--------------|--|--|--|--|--|
| Anaesthesia for ASA 1-2 patients | | | | | | | |
| Workplace Based Assessments | Workplace Based Assessments | | | | | | |
| Required Workplace based assessment | | | | | | | |
| Available WBAs | CBD: DOPS: Mini-CEX: | 5 11 3 | | | | | |
| Courses | | | | | | | |
| Simulation | Anaesthesiology Emergencies | | | | | | |

Regional Anaesthesia (i) – Neuraxial and Foundation Peripheral Nerve Blockade

Description:

After completing this unit, the trainee will demonstrate sufficient skill to deliver safe regional neuraxial anaesthetic care for both anaesthesia and analgesia purposes. The trainee will demonstrate sufficient skill to perform basic regional anaesthetic techniques with distant supervision, including axillary nerve block and femoral nerve block.

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-----|---|------------|
| | | | PRE-PROCEDURE | |
| RN_C_1 | 3 | S,A | Obtains consent Accepts the right of the patient to decline regional anaesthesia, even when there are clinical advantages | DOPS |
| RN_C_2 | 8 | S | Conducts appropriate patient assessment and identifies risk factors and preoperative medical interventions | DOPS |
| RN_C_3 | 6 | К | Discusses advantages and disadvantages of regional anaesthesia | FCAI |
| RN_C_4 | 6 | К | Discusses indications and contra-indications- including relative and absolute Outlines principles in guidelines on anticoagulation and neuraxial anaesthesia | MCAI |
| RN_C_5 | 4 | S | Demonstrates list planning to allow time for the conduct of a block and for it to take effect | Mini-CEX |
| RN_C_6 | 3,4 | А | Shows good communication skills towards the patients and staff during the use of regional blockade | Mini-CEX |
| | | | PROCEDURE | |
| RN_C_7 | 6 | К | Describes anatomy relevant to neuraxial blockade Describes the anatomy of the vertebral column, spinal cord and meninges relevant to the performance of central neuraxial block with appropriate surface markings Describes the dermatomal innervations Describes the myotomal innervation Describes the pain and sensory pathways | MCAI |
| RN_C_8 | 6 | К | Describes anatomy relevant to axillary nerve block Describes the anatomy of the brachial plexus relevant to the performance of axillary nerve block Describes sensory and motor innervation of the brachial plexus | MCAI |
| RN_C_9 | 6 | К | Describes anatomy relevant to femoral nerve block Describes the anatomy of the lumbar plexus relevant to the performance of femoral nerve block Describes sensory and motor innervation of the lumbar plexus | MCAI |
| RN_C_10 | 6,8 | к | Recalls relevant physiology and pharmacology of local anaesthetic agents Describe factors influencing dose and choice of anaesthetic agents for spinal anaesthesia and epidural anaesthesia/analgesia Describe how the baricity of the agents used and positioning of patients may affect the extent of block in spinal anaesthesia Describe the drugs which may be injected into the intrathecal or epidural space as adjuvant agents to a central neuraxial block and discuss their risks and benefits | MCAI |
| RN_C_11 | 2,3 | А | Shows care and sensitivity to the patient's needs during performance of regional block | DOPS |

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-----|---|------------|
| | | | PROCEDURE CONTINUED | |
| RN_C_12 | | | Demonstrates safety during the blockade, including: Confirming site of surgery has been marked, and confirming site of regional technique Attaches appropriate monitoring Establishes intravenous access Positioning of patient | |
| (SALUS) | 1,8 | S | Identification of anatomical landmarks Use of aseptic technique Selection of appropriate needle Selecting, checking, drawing up, diluting, and labelling of drugs for injection Checking for inadvertent intravenous and intraneural administration | Mini-CEX |
| RN_C_13 | 6 | К | Describes basic relevant physics and clinical application of ultrasound to regional anaesthesia | MCAI |
| RN_C_14 | 8 | S | Demonstrates appropriate skills in the specific area of neuraxial blockade | DOPS |
| RN_C_15 | 6 | К | Describes the midline and paramedian approaches to the sub-arachnoid space and epidural space | MCAI |
| RN_C_16 | 8 | S | Describes how to assesses the adequacy of a regional technique Outlines management of incomplete or failed regional blockade Discusses rescue techniques | CBD |
| RN_C_17 | 8 | К | Discusses the principles of continuous epidural infusions Describes clinical situations in which epidural blockade or combined spinal/epidural may be indicated in preference to spinal anaesthesia alone | |
| RN_C_18 | 4,8 | A,S | Shows the ability to correctly manage the theatre environment with an awake or sedated patient Demonstrates methods of sedation used in conjunction with regional anaesthesia Shows consideration for the views of patients, surgeons and theatre team with regard to surgery under regional blockade Manages patients with combined general and regional anaesthesia | |
| RN_C_19 | 6 | К | Describes the prevention and management of nausea, hypotension and bradycardia associated with a central neuraxial block | CBD |
| RN_C_20 | 8 | K,S | Describes the management of immediate complications accidental total spinal accidental dural tap post-dural puncture headache local anaesthetic toxicity: signs and symptoms management and the use of intra-lipid accidental intravenous administration of local anaesthetic drugs: signs, symptoms, management | MCAI |
| RN_C_21 | 8 | S | Documents the procedure and any complications | DOPS |
| RN_C_22 | 8 | К | Describes how to recognise, diagnose and manage delayed complications, including but not limited to haematoma, nerve injury, epidural abscess and meningitis | MCAI |

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-----|--|------------|
| | | | POST-PROCEDURE | |
| RN_C_23 | 6 | К | Lists advantages and disadvantages of regional anaesthesia for post-operative analgesia Discuss the relevance of anti-coagulation when removing epidural catheters | MCAI |
| RN_C_24 | 8 | S | Appropriately prescribes continuous epidural infusions | DOPS |
| RN_C_25 | 8 | К | Describes problems and solutions to obtaining adequate post-operative analgesia in the ward or home when regional anaesthesia wears off | CBD |
| RN_C_26 | 1 | К | Knows the criteria for safe discharge of a patient under regional blockade | CBD |
| RN_C_27 | 1 | А | Explains the need to review patients following regional technique to ensure block has worn off and there are no residual complications | MCAI |

| Volume of Practice | | | | | | |
|-------------------------------------|------------------------|----|--|--|--|--|
| Epidurals Total | | | | | | |
| Lumbar (can include obstetrics) | | | | | | |
| Minimum 5 thoracic | | | | | | |
| Spinals Total: 70 | | 70 | | | | |
| (max. 30 obstetric) | | | | | | |
| Axillary nerve block | | 5 | | | | |
| Femoral nerve block | | | | | | |
| Total minimum VOP: | | | | | | |
| Workplace Based Assessments | | | | | | |
| Required Workplace based assessment | | 4 | | | | |
| | CBD: | 4 | | | | |
| Available WBAs DOPS: | | | | | | |
| Mini-CEX: | | | | | | |
| Courses | | | | | | |
| Course | ISRA foundation course | | | | | |

Anaesthesia for Ambulatory Surgery

Description:

After completing this unit, the trainee will demonstrate sufficient skill to deliver safe perioperative anaesthetic care to ASA I-III patients presenting for ambulatory surgery. They will have knowledge of the organisational aspects of ensuring a day service unit runs efficiently.

| | Domain | KSA | Expected Standards | Assessment |
|------------------------|--------|-----|--|------------|
| | | | DESCRIBE THE ORGANISATIONAL ASPECTS OF AMBULATORY SURGERY | |
| AA_C_1 SALUS | 1,5 | К | Describes the requirements of a facility to meet the requirements for ambulatory surgery | FCAI |
| AA_C_2 | 4,5 | К | Describes the staffing requirements for ambulatory surgery | FCAI |
| AA_C_3 | 1,7 | К | Displays knowledge of local and national guidelines for the provision of ambulatory surgical services | FCAI |
| AA_C_4 | 1 | К | Discusses advances and controversies in anaesthesia for ambulatory surgery | FCAI |
| | | | PRE-OPERATIVE | |
| aa_c_5 (salus) | 1,2 | A | Outlines requirements for the patients to ensure their suitability for day case procedures, with regard to Complexity of surgery Co-morbidities Social support | CBD |
| AA_C_6 (SALUS) | 1,5 | к | Describes the protocols for selection of day surgery Medical Surgical Social | CBD |
| AA_C_7 | 3,7 | А | Ensures a professional and courteous manner when interacting with patients, nursing staff and surgical and medical colleagues | Mini-CEX |
| AA_C_8 | 2,3 | А | Cultivates a professional and reassuring manner to allay patient anxiety | Mini-CEX |
| AA_C_9 <i>SALUS</i> | 1, 4 | К | Describes the principles of pre-operative assessment of patients presenting for ambulatory surgery Understands and describes the role of nurse-led assessment | MCAI |
| AA_C_10 SALUS | 1,5 | К | Explains the role of appropriate pre-operative investigations for day surgery | MCAI |
| | | | ANAESTHESIA | |
| AA_C_11 | 6 | К | Describes the pharmacology and selection of appropriate drugs for ambulatory anaesthesia | MCAI |
| AA_C_12 | 7,8 | S | Demonstrates the appropriate clinical skills and management skills of a general anaesthesiologist in the specific area of general anaesthesia for day case surgery TIVA ('total intravenous anaesthesia') Conscious sedation Mask ventilation | DOPS |

| | Domain | KSA | Expected Standards | Assessment |
|-------------------------------|--------|-----|--|------------|
| | | | ANAESTHESIA CONTINUED | |
| AA_C_13 | 7,8 | S | Demonstrates the appropriate clinical skills and management skills of a general anaesthesiologist in the specific area of regional anaesthesia including | DOPS |
| | | | Spinal anaesthesia for day surgery Basic regional blocks | |
| AA_C_14 <mark>SALUS</mark> | 1,8 | S | Discusses appropriate choice of analgesia for ambulatory surgery including NSAIDs ('non-steroidal anti-inflammatory drugs') Local/Regional Opiates | |
| AA_C_15 SALUS | 1,8 | К | Discusses anaesthetic management of the paediatric patient for day case surgery | CBD |
| | | | POST-OPERATIVE | |
| AA_C_16 | 5,8 | S | Discusses strategies to reduce post-operative nausea and vomiting in day case patients | MCAI |
| AA_C_17 SALUS | 1,5 | К | Explains the potential causes of unanticipated in-patient admission ollowing day surgery | |
| AA_C_18 | 1 | К | Discusses discharge criteria and assessment of the recovery of day surgery patients | MCAI |
| AA_C_19 | 8 | К | Explains the management of recovery of day surgery patients including: Instructions for patients Discharge medications, including analgesia | MCAI |

| Volume of Practice | | | | | | |
|-------------------------------------|-----------|------|--|--|--|--|
| ASA I&II | | 160 | | | | |
| Including paediatrics | | (20) | | | | |
| Including Elderly | | (20) | | | | |
| Including BMI >30 | | (20) | | | | |
| ASA III/IV | | | | | | |
| Total | | | | | | |
| Workplace Based Assessments | | | | | | |
| Required Workplace based assessment | | | | | | |
| CBD: | | | | | | |
| Available WBAs | DOPS: | 2 | | | | |
| | Mini-CEX: | 2 | | | | |

Anaesthesia for Orthopaedic Surgery

Description:

By the completion of this unit, trainees will be able to provide anaesthesia for patients requiring orthopaedic procedures.

| | Domain | KSA | Expected Standards | Assessment |
|-----------------|--------|-----|---|------------|
| OR_C_1 | 6 | К | Describes the common comorbidities encountered in patients having elective and emergency orthopaedic procedures and their implications | MCAI |
| OR_C_2 | 1 | К | Discusses the assessment and anaesthetic management of the elderly patient with a hipfracture | MCAI |
| OR_C_3 | 4 | А | Participates in multidisciplinary optimisation of the frail patient for orthopaedic surgery | Mini-CEX |
| OR_C_4 | 6 | К | Discusses the anaesthetic implications of and common comorbidities associated with e.g. the following conditions: Osteoarthritis Rheumatoid arthritis Ankylosing spondylitis Morbid obesity The frail patient Disorders of coagulation Anaemia Bone tumours Cerebral palsy Neuromuscular disorders Disorders of spine curvature | MCAI |
| OR_C_5 | 6 | К | Discusses the options available for perioperative pain management of patients undergoing elective and/or emergency orthopaedic surgery, including the use of analgesia adjuncts | CBD |
| OR_C_6 | 1 | К | Discusses the advantages and disadvantages of regional anaesthesia and analgesia for orthopaedic surgery | MCAI |
| OR_C_7 | 1 | К | Discusses the use of thromboprophylaxis for orthopaedic patients especially joint replacement | FCAI |
| OR_C_8 SALUS | 1 | К | Discusses the perioperative management of patients on therapeutic anticoagulation requiring anaesthesia for orthopaedic procedures, including indications for bridging anticoagulation peri-operatively | CBD |
| OR_C_9 SALUS | 1 | К | Discusses the choice and timing of antibiotic prophylaxis for orthopaedic patients | MCAI |
| OR_C_10 | 1 | К | Evaluates methods to reduce intraoperative and postoperative blood loss and minimises the need for blood transfusion during or following orthopaedic procedures | FCAI |
| OR_C_11 | 1 | К | Discusses perioperative management of Jehovah's Witness patients presenting for major orthopaedic procedures | FCAI |
| OR_C_12 | 1 | К | Discusses the safe use of limb tourniquets for orthopaedic procedures | MCAI |
| OR_C_13 | 6 | К | Discusses the implications of positioning for orthopaedic surgery, including: Lateral positioning Prone positioning Beach chair positioning | CBD |
| OR_C_14 | 6 | К | Outlines the common comorbidities associated with scoliosis and the anaesthetic management of patients having scoliosis correction surgery, including the need for, and implications of neurophysiological monitoring | FCAI |
| OR_C_15 | 6 | К | Describes the methods of spinal cord monitoring during spinal surgery | FCAI |

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|---|---|------------|
| OR_C_16 SALUS | 1 | K Discusses the diagnosis and management of possible complications of orthopaedic surgery including: Bone cement implantation syndrome Fat embolism syndrome Pulmonary embolism Compartment syndrome Major blood loss Anaphylaxis Local anaesthetic toxicity, symptoms and management | | FCAI |
| OR_C_17 | 1 | K | Neurological injury Tourniquet-induced ischaemia-reperfusion injury Chronic and persistent pain Describes the principles of perioperative anaesthetic management of the | FCAI |
| | _ | | patient for pelvic bone and joint surgery Discusses the perioperative anaesthetic management of patients with | |
| OR_C_18 | 8 | К | implantable cardiac devices Communicates effectively with patients and family members when appropriate | FCAI |
| OR_C_19 | 2 | Α | Obtains consent for regional anaesthesia technique if appropriate | DOPS |
| OR_C_20 | 8 | S | Provides anaesthesia for patients requiring elective orthopaedic surgery including but not limited to: Hip arthroplasty Knee arthroplasty Revision joint arthroplasty Knee arthroscopy Foot and ankle surgery Discectomy Spinal fusion Shoulder surgery including shoulder arthroplasty Elbow, wrist and hand surgery | Mini-CEX |
| OR_C_21 | 8 | S | Provides anaesthesia for patients requiring emergency orthopaedic surgery including but not limited to: Hip fracture Internal fixation of long bone fracture (femoral, tibial, humoral) Elbow fracture Wrist fracture Tendon repair Pathological fractures | Mini-CEX |
| OR_C_22 | 5 | S | Demonstrates the decision-making and organisational skills required of an anaesthesiologist to manage an Orthopaedic list ensuring that the care delivered is safe and timely, benefiting both the patient and the organisation. | DOPS |

| Volume of Practice | | | | | | | | |
|-------------------------------------|-------------|----|--|--|--|--|--|--|
| Hip fracture surgery | | | | | | | | |
| Internal fixation of long bones | | | | | | | | |
| Elective hip arthroplasty | | 10 | | | | | | |
| Knee arthroplasty | | 10 | | | | | | |
| Shoulder surgery | | 5 | | | | | | |
| Arthroscopy | Arthroscopy | | | | | | | |
| Back surgery | | | | | | | | |
| Total minimum VOP: | | | | | | | | |
| Workplace Based Assessments | | | | | | | | |
| Required Workplace based assessment | | | | | | | | |
| | CBD: | 3 | | | | | | |
| Available WBAs | DOPS: | 2 | | | | | | |
| | Mini-CEX: | 3 | | | | | | |

Trauma Management

Description:

The trainee will be able to participate as a key multi-disciplinary team member in the initial resuscitation and management of trauma patients with life threatening medical and surgical conditions.

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-----|--|------------|
| | | | GENERAL PRINCIPLES | |
| TR_C_1 | 5 | К | Explains the hospital triage system of trauma patients and scoring systems used | FCAI |
| TR_C_2 | 5 | К | Outlines local disaster management protocols | CBD |
| TR_C_3 | 1 | К | Outlines infection control techniques in the trauma environment | CBD |
| TR_C_4 | 6 | К | Explains the principles of the primary and secondary survey in trauma patients | MCAI |
| TR_C_5 | 6 | К | Describes the pathophysiological changes that occur in the trauma patient | MCAI |
| TR_C_6 | 6 | К | Discusses the effects of age, BMI, co-morbidities on the presentation and management of the multi-trauma patient | FCAI |
| | | | PRIMARY SURVEY | |
| TR_C_7 | 8 | K,S | Describes indications for definitive airway management in the trauma patient, including special skills for inline stabilisation the need for advanced airway techniques the need for emergency front of neck access techniques | MCAI |
| TR_C_8 | 1 | S | Knows the principles of spinal precautions, including the indications, sizing and application of spinal collars Demonstrates the conduct of a log roll in the patient with spinal precautions | DOPS |
| TR_C_9 | 6 | K,S | Discusses the differential diagnosis of hypoxia in the trauma patient Outlines changes in blood gas analysis in the shocked patient Identifies indicators of tissue oxygenation base deficit, lactate, oxygen saturation etc. | FCAI |
| TR_C_10 | 8 | к | Discusses options for intravenous access in the trauma patient Including intraosseous, central venous techniques | MCAI |
| TR_C_11 | 6 | К | Discusses the differential diagnosis of shock Diagnose and manage cardiac tamponade | FCAI |
| TR_C_12 | 8 | K,S | Describes methods to manage hypotension and shock including Fluid resuscitation Inotropes, vasopressors | MCAI |
| TR_C_13 | 4,8 | К | Discusses the diagnosis and management of cardiac tamponade | FCAI |
| TR_C_14 | 8 | к | Explains the management of massive blood loss including rapid infusion devices | FCAI |
| TR_C_15 | 8,4 | K,S | Discusses the initial assessment and management of the neurological injury, including but not limited to Acute traumatic brain injury Unstable spinal injury Clearing the c-spine Neurogenic shock | FCAI |

| | Domain | KSA | Expected Standards | Assessment |
|-------------------------|--------|-----|--|------------|
| | | | PRIMARY SURVEY CONTINUED | |
| TR_C_16 <i>SALUS</i> | 1 | К | Describes rationale and methods for immobilisation of Pelvic fractures Long bone fractures | FCAI |
| TR_C_17 | 1 | K,S | Discusses the effects of hypothermia and methods to prevent hypothermia | MCAI |
| TR_C_18 | 8,4 | K,S | Describes initial investigations in a trauma patient Describes imaging requirements in the emergency room Interprets imaging related to the primary survey | MCAI |
| TR_C_19 | 8 | K,S | Describes the role of ultrasound in the initial assessment of the trauma patient Demonstrates understanding of FAST/POCUS scan (focused assessment with sonography in trauma / point of care ultrasound) | CBD |
| | | | SECONDARY SURVEY | |
| TR_C_20 | 8 | К | Discusses the diagnosis and management of life-threatening haemorrhage, including but not limited to Chest trauma Abdominal trauma Pelvic trauma Vascular trauma | CBD |
| TR_C_21 | 8 | К | Describes the initial assessment, management and resuscitation of patients requiring emergent management, including, but not limited to Severe burns Electrical injuries Drowning and near drowning Hypothermia | |
| TR_C_22 | 8 | К | Explains the principles of managing a patient with traumatic brain injury Describe strategies to minimise secondary injury | FCAI |
| TR_C_23 | 8 | К | Describe strategies to minimise secondary injury Discusses the initial diagnosis and management of thoracic trauma, including but not limited to Pneumothorax Flail chest Pulmonary contusion Traumatic aortic disruption Tracheobronchial injury | |
| TR_C_24 | 6 | К | Outlines the indications for emergency thoracotomy | FCAI |
| TR_C_25 | 8 | К | Describes the initial assessment and management of the patient with burn injury, including but not limited to Fluid management Pain management Inhalational injury Carbon monoxide poisoning | FCAI |
| TR_C_26 | 6 | К | Describes problems associated with crush injury | FCAI |
| TR_C_27 | 6 | К | Describes clinical features and management of compartment syndrome including monitoring and pain management | FCAI |
| | | | DEFINITIVE MANAGEMENT | |
| TR_C_28 | 8 | К | Discusses the importance of pain management in the trauma patient | MCAI |

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-------|--|------------|
| | | | DEFINITIVE MANAGEMENT CONTINUED | |
| TR_C_29 | 1 | К | Discusses indications and contra-indications for regional and peripheral nerve blocks in the patient with multiple injuries | FCAI |
| TR_C_30 | 1 | К | Identifies contraindications to e.g. urinary catheterisation and nasogastric tube insertion | MCAI |
| TR_C_31 | 1,4 | К | Discusses principles of clinical management for the stabilisation and transfer of the patients with multiple injuries | FCAI |
| TR_C_32 | 2,3 | K,S,A | Discusses special problems related to patients requiring emergency surgery and how they should be managed, including Managing patients anxiety and fear Recognising the patient may have severe pain which should be treated Understands that severe-co-existing disease may be inadequately treated Understands the pathophysiological changes and organ dysfunction associated with acute illness Recognises the hypovolaemic patient and understands the importance of pre-operative resuscitation including fluid and electrolyte correction | CBD |
| TR_C_33 | 2,3 | A | Describes specific ethical issues associated with managing the patient with multiple injuries, including issues relating to brainstem death and organ donation | FCAI |
| | | | COMMUNICATION SKILLS AND TEAM WORKING | |
| TR_C_34 | 2,3 | А | Communicates well with the patient and/or family providing clear and appropriate explanations of anaesthetic concerns and plans | Mini-CEX |
| TR_C_35 | 4,5 | A | Demonstrates the ability to work well in a health care team Values the experience of others Seeks advice and refers when appropriate | DOPS |
| TR_C_36 | 1,2 | А | Outlines the patient's right to privacy, dignity and right to self- determination, including the rights to refuse treatment | CBD |

| Volume of Practice | | | | | |
|-------------------------------------|--|-----------------|--|--|--|
| Trauma team member | | | | | |
| Workplace Based Assessments | | | | | |
| Required Workplace based assessment | | | | | |
| Available WBAs | CBD: DOPS: Mini-CEX: | 6 2 1 | | | |
| Courses | | | | | |
| Simulation | Anaesthesiology Emergencies; ARREST; PAE; Mascot | : 1/2; A-Crisis | | | |

Transfer of the Critically Unwell Patient

Description:

The trainee will demonstrate the knowledge and skill to safely perform intra-and inter hospital transfer of the critically unwell patient. They will demonstrate knowledge of safe transfer procedures, including the stabilisation of the patient prior to transfer. They will have an understanding of the organisational aspects necessary to ensure safe transfer of the critically unwell patient.

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-----|---|------------|
| | | | PREPARATION | |
| | | | Organisational | |
| TF_C_1 | 1,5 | К | Discusses hospital protocols governing transfers between departments Outlines regional protocols for organising transfer between departments | CBD |
| TF_C_2 | 6 | К | Explains the risk/benefits of intra-hospital and inter-hospital transfer | FCAI |
| TF_C_3 | 6 | К | Explains the concepts of primary retrieval and secondary transport/retrieval | FCAI |
| TF_C_4 | 6 | К | Explains how time-critical elements may influence the risks to the patient and transfer personnel and how these should be managed | FCAI |
| TF_C_5 | 1,6 | А | Outlines the ethical issues related to patient transfer | FCAI |
| TF_C_6 | 1,4,5 | А | Outlines the roles and responsibilities of all staff accompanying the patient during transfer including the ambulance personnel | FCAI |
| TF_C_7 | 1,6 | К | Describes minimum monitoring required for safe transfer | MCAI |
| TF_C_8 | 1,6 | К | Describes basic equipment, including back-up equipment required for transfer | MCAI |
| TF_C_9 | 6 | К | Describes the personal equipment needed when leading a transfer, especially when a prolonged journey is anticipated | MCAI |
| | | | Patient related | |
| TF_C_10 | 1,2,3 | А | Discusses the need for transfer with the patient and their family | CBD |
| TF_C_11 | 6,8 | S | Explains the importance of ensuring a patient's clinical condition is optimised and stable prior to transfer | CBD |
| TF_C_12 | 6 | К | Outlines the hazards associated with inter-hospital transfer, including physical, psychological and organisational | MCAI |
| TF_C_13 | 6 | К | Describes increased risk to critical care patients and the reasons for these risks | FCAI |
| TF_C_14 | 6 | S | Outlines the specific considerations of transfer of patients with specific clinical conditions, including but not limited to head, spinal, thoracic and pelvic injuries critically ill medical patients burns | FCAI |
| TF_C_15 | 1 | S | Discusses the role of the anaesthesiologist as a team member to resuscitate and stabilise the critically ill adult patient Outlines specific considerations of the transfer of the critically ill adult patient | MCAI |
| TF_C_16 | 1 | S | Discusses the role of the anaesthesiologist as a team member to resuscitate and stabilise the critically ill child Outlines specific considerations of the transfer of the critically ill child | MCAI |

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|--|------------|
| | | | PREPARATION CONTINUED | |
| | | | Patient related | |
| TF_C_17 | 1 | S | Discusses the role of the anaesthesiologist as a team member to resuscitate and stabilise the critically ill pregnant or peri-partum patient Outlines specific considerations of the transfer of the critically ill pregnant or peri-partum patient | MCAI |
| TF_C_18 | 6 | S | Describes strategies to minimise the risk of inter and intra-hospital transfer, including stabilisation pre-emptive intervention sedation monitoring choice of mode of transfer | CBD |
| TF_C_19 | 8 | S | Correctly assesses the clinical status of a patient and decide whether they are in a suitably stable condition for intra-hospital transfer | Mini-CEX |
| | | | TRANSFER | |
| | | | Transfer specific | |
| TF_C_20 | 6 | S | Explains the problems caused by complications arising during transfer and measures necessary to minimise and pre-empt difficulties | MCAI |
| TF_C_21 | 6 | К | Describes the safety implications of transport equipment that may be used during patient transfer | MCAI |
| TF_C_22 | 6 | А | Outlines the problem of infection and contamination risks when moving an infected patient | MCAI |
| TF_C_23 | 6 | К | Describes the physiological effects of transport including the effects of acceleration and deceleration | FCAI |
| TF_C_24 | 6 | К | Discusses the effect of high ambient noise on patients and alarm status | FCAI |
| TF_C_25 | 6 | К | Discusses the increased risk of interventions during hospital transfer | CBD |
| | | | Organisational | |
| TF_C_26 | 4,5,6 | А | Explains the lines of responsibility that should be followed during transfer | MCAI |
| TF_C_27 SALUS | 1 | А | Describes the importance of record keeping during transfer | MCAI |
| TF_C_28 | 1,4,5 | А | Outlines the importance of maintaining communication, when appropriate, with the patient and members of the transfer team | MCAI |
| | | | Patient related | |
| TF_C_29 | 2,3 | А | Outlines consent requirements and patient discussion required prior to transfer | MCAI |
| TF_C_30 | 2,3 | S | Explains how to assess and manage unco-operative and aggressive patients during transfer | MCAI |
| TF_C_31 | 6 | к | Discusses the reasons for a patient becoming unstable during transfer | FCAI |
| TF_C_32 | 6,8 | S | Discusses how to manage a patient who develops sudden airway difficulty whilst in transit both intubated and unintubated patients | FCAI |

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|--|------------|
| | | | TRANSFER CONTINUED | |
| | | | Patient related | |
| TF_C_33 | 8 | S | Demonstrates how to safely secure the patients airway and intra-vascular access | DOPS |
| TF_C_34 | 8 | S | Demonstrates safety in securing the patient | DOPS |
| TF_C_35 | 8 | S | Demonstrates appropriate choice of sedation, muscle relaxation and analgesia to maintain the patient's clinical status during transfer | Mini-CEX |
| TF_C_36 SALUS | 1,8 | S | Demonstrates the ability to maintain monitoring of the patient during transfer | Mini-CEX |
| TF_C_37 | 5 | А | Discusses the legal aspect of death in transit | FCAI |
| TF_C_38 | 6,7 | А | Discusses the importance of auditing practice and reporting critical incidents that arise during inter-hospital transfer | FCAI |
| TF_C_39 | 6 | А | Discusses the need for audit, research and quality improvement around transport and transfer of the critically unwell patient | CBD |

| Volume of Practice | | | | | |
|--|-----------------|--|--|--|--|
| Intra-hospital transfers: Inter-hospital transfers: Total minimum VOP: | | | | | |
| Workplace Based Assessments | | | | | |
| Required Workplace based assessment | | | | | |
| Available WBAs CBD: DOPS: Mini-CEX: | | | | | |
| Courses | | | | | |
| Course | Transfer Course | | | | |



Section Four: Modular Units



Section Four: Modular Units

Anaesthesia for General, Urological and Gynaecological Surgery

Description:

By the completion of this unit, the trainee will be competent in providing anaesthesia for patients requiring general, urological and gynaecological surgery.

| | Domain | KSA | Expected Standards | Assessment |
|-------------------------|--------|---|--|--------------|
| GA_M_1 | 6 | Discusses the key clinical features which influence anaestheticmanagement:Breast diseaseDisease of the oesophagusDisease of the stomachGallbladder diseaseKBowel diseaseSplenic diseaseLiver diseasePancreatic diseaseAdrenal diseaseRenal and urinary diseaseGynaecological diseases | | MCAI FCAI |
| GA_M_2 | 6 | К | Explains the physical and physiological effects of laparoscopic surgery including the effects of positioning and their management | MCAI |
| GA_M_3 | 6 | К | Outlines the differential diagnosis of acute abdomen and the implications for anaesthesia of the different causes | CBD |
| GA_M_4 | 6 | К | Outlines the consequences of prolonged vomiting, bowel obstruction and malabsorption syndrome | MCAI |
| GA_M_5 | 6 | К | Outlines the principles of the anaesthetic management of patients with renal failure for non-transplant surgery | CBD |
| GA_M_6 | 6 | К | Outlines the anaesthetic implications of bariatric surgery | FCAI |
| GA_M_7 SALUS | 1 | К | Outlines the principles of enhanced recovery care pathways | MCAI |
| GA_M_8 | 6 | К | Describes the rationale and principles of perioperative haemodynamic management and optimisation | FCAI |
| GA_M_9 | 6 | К | Discusses perioperative analgesia and fluid management for major laparotomy | FCAI |
| GA_M_10 <u>SALUS</u> | 1 | к | Discusses the diagnosis and management of the possible complications of surgical procedures including: Venous air embolism Major haemorrhage Aspiration Pneumoperitoneum Sepsis Reperfusion of ischaemic organs Acid-base imbalance Temperature control Positioning injuries | MCAI |
| GA_M_11 | 2 | К | Describes the principles of preoperative evaluation of patients at risk of postoperative morbidity, including risk stratification tools, for example scoring systems | FCAI |
| GA_M_12 | 6 | К | Describes the principles of management of non-fasted patients requiring emergency surgery | MCAI |

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-----|---|------------|
| GA_M_13 | 6 | K | Explains the specific problems of anaesthesia for non-obstetric surgery in the pregnant patient | MCAI |
| GA_M_14 | 6 | К | Outlines the perioperative management of patients for renal transplant surgery | FCAI |
| GA_M_15 | 6 | К | Outlines the perioperative management of the common complex cases including, but not limited to: Pancreatic and liver resection Oesophagectomy Resection of neuroendocrine tumours e.g. carcinoid, phaeochromocytoma Splenectomy Resection of retroperitoneal masses including management of pleural breach | FCAI |
| GA_M_16 | 8 | S | Provides anaesthesia for breast surgery, including mastectomy | DOPS |
| GA_M_17 | 8 | S | Provides anaesthesia for elective upper gastrointestinal endoscopy, including PEG (percutaneous endoscopic gastrostomy) insertion, ERCP ('endoscopic retrograde cholangio-pancreatography') | DOPS |
| GA_M_18 | 8 | S | Provides anaesthesia for emergency oesophago-gastro-duodenoscopy for upper gastrointestinal bleeding | DOPS |
| GA_M_19 | 8 | S | Provides anaesthesia for upper abdominal laparoscopic surgery, for example, fundoplication, cholecystectomy, nephrectomy, bariatric surgery | DOPS |
| GA_M_20 | 8 | S | Provides anaesthesia for lower abdominal laparoscopic surgery, for example, oophorectomy, endometrial ablation, assisted hysterectomy and colectomy | DOPS |
| GA_M_21 | 8 | S | Provides anaesthesia for major open upper abdominal surgery, for example, gastrectomy, fundoplication, cholecystectomy, splenectomy, nephrectomy | DOPS |
| GA_M_22 | 8 | S | Provides anaesthesia for patients requiring major open lower abdominal surgery, for example, colectomy, abdomino-perineal resection, cystectomy, hysterectomy, prostatectomy | DOPS |
| GA_M_23 | 8 | S | Provides anaesthesia for abdominal wall, perineal and percutaneous surgery, for example, percutaneous nephrolithotripsy, procedures on the vagina, scrotum, penis, perianal procedures, hernia repairs | DOPS |
| GA_M_24 | 8 | S | Provides anaesthesia and sedation for colonoscopy and per rectal procedures | DOPS |
| GA_M_25 | 8 | S | Provides anaesthesia for endoscopic urological surgery, for example, cystoscopy, resection of prostate, ureteroscopy, bladder resection | DOPS |
| GA_M_26 | 8 | S | Provides anaesthesia for major per vaginal surgery, for example, hysterectomy, vaginal repair | DOPS |
| GA_M_27 | 8 | S | Provides anaesthesia for emergency laparotomy, including for, but not limited to, presumed bleeding, perforation, ischaemia, infection, inflammation | Mini-CEX |
| GA_M_28 | 8 | S | Provides anaesthesia for emergency laparotomy and pelvic surgery, for example, appendicectomy, ectopic pregnancy, bowel obstruction, nephrolithiasis | Mini-CEX |
| GA_M_29 | 4 | S | Communicates and collaborates effectively in situations requiring multidisciplinary collaboration, for example: Removal of endocrine tumours, Surgical bleed | Mini-CEX |
| GA_M_30 | 5 | А | Manages lists requiring rapid turnover of short cases, for example: Cysto-ureteroscopies, Minor gynaecological cases | Mini-CEX |

| Volume of Practice | | | | | | |
|---|-----------|-----|--|--|--|--|
| Emergency laparotomy | 25 | | | | | |
| Laparoscopic upper abdominal surgery | 20 | | | | | |
| Elective major open upper abdominal surgery | | 10 | | | | |
| Laparoscopic lower abdominal and pelvic surgery | | 20 | | | | |
| Elective major open abdominal & pelvic surgery | | 15 | | | | |
| Abdominal wall and perineal surgery | | 20 | | | | |
| Endoscopic urological surgery | 20 | | | | | |
| Major per vaginal surgery | | 5 | | | | |
| Breast surgery | | 5 | | | | |
| Upper GI (gastro-intestinal) endoscopy | 10 | | | | | |
| Colonoscopy and per rectal procedures | 5 | | | | | |
| Total minimum VOP: | | 155 | | | | |
| Workplace Based Assessments | | | | | | |
| Required Workplace based assessment | | | | | | |
| | CBD: | 2 | | | | |
| AvailableWBAs | DOPS: | 11 | | | | |
| | Mini-CEX: | 4 | | | | |

Anaesthesia for Plastic and Reconstructive Surgery, including Burns

Description:

By the completion of this unit, the trainee will be able to resuscitate and manage the patient with burns and will be able to provide safe perioperative care to patients having plastic and reconstructive surgery.

| | Domain | KSA | Expected Standards | Assessment |
|------------------------|--------|-----|---|------------|
| | | | PLASTIC AND RECONSTRUCTIVE SURGERY | |
| PB_M_1 | 6 | К | Describes the different types of tissue flaps | FCAI |
| PB_M_2 | 6 | S | Describes the factors affecting tissue blood flow with respect to free-flap surgery and how to optimise blood flow to tissue flaps | FCAI |
| PB_M_3 | 8 | к | Discusses the potential issues that arise during anaesthesia of the patient having surgery for tissue flaps, e.g.: Prolonged anaesthesia Limited access to the patient Potential for occult blood loss during prolonged surgery Optimising conditions for flap survival Multidisciplinary collaboration and communication | CBD |
| PB_M_4 <i>SALUS</i> | 1 | К | Discusses pain management for patients undergoing plastic and reconstructive surgery | FCAI |
| PB_M_5 | 8 | S | Ensures careful handling of patients with skin grafts on transfer to prevent disruption of the grafts | Mini-CEX |

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-----|---|------------|
| PB_M_6 | 6 | к | Discusses the principles of the postoperative management of the patient who underwent surgery for tissue flaps | CBD |
| | | | BURNS | |
| PB_M_7 | 6 | К | Describes the types and pathophysiology of burns and their systemic effects | FCAI |
| PB_M_8 | 6 | S | Discusses the initial assessment and resuscitation of the burns patient | FCAI |
| PB_M_9 | 6 | S | Discusses the potential associated injuries in the burns patient | FCAI |
| PB_M_10 | 6 | К | Discusses temperature homeostasis in the patient with burns and the implications of hypothermia | FCAI |
| PB_M_11 | 6 | S | Discusses the potential mechanisms of the airway injury in the burns patient and its implications for the anaesthesiologist | FCAI |
| PB_M_12 | 8 | S | Discusses the issues associated with monitoring and securing intravenous access in the patient with burns | CBD |
| PB_M_13 | 6 | К | Describes methods used for estimation of the extent of the burns injury | FCAI |
| PB_M_14 | 6 | К | Discusses calculation of fluid resuscitation for the patient with burns | FCAI |
| PB_M_15 | 6 | К | Discusses the anaesthetic and analgesic considerations and indications for surgery and procedures in the patient with burns, including Escharotomy and decompressive therapies Wound debridement and grafting Dressing changes | FCAI |
| PB_M_16 | 6 | К | Discusses the considerations in the critical care management of the patient with burns, including Fluid resuscitation and electrolyte management Mechanical ventilation Hypothermia Metabolism and nutrition Infection Psychological care/rehabilitation | FCAI |
| PB_M_17 | 3 | А | Provides emotional support to and approaches with empathy the patient and the family of the patient with burns | FCAI |

| Volume of Practice | | | | | |
|---|----------------------------|--------------------|--|--|--|
| Reconstructive surgery Burns patient: resuscitation, and anaesthesia Total minimum VOP: | | | | | |
| Workplace Based Assessments | | | | | |
| Required Workplace based assessment | | | | | |
| Available WBAs | CBD: DOPS: Mini-CEX: | 3 - 1 | | | |

Anaesthesia Outside of the Operating Theatre, including conscious sedation

Description:

By the completion of this modular unit, the trainee will have gained competency in recognising and dealing with the challenges of providing anaesthesia in locations outside of the operating theatre suite, including but not limited to: MRI scanner, CT scanner, Interventional Radiology Suite (e.g. for ERCP, cardiac catheterisation), for electroconvulsive therapy, for cardioversion, for procedures in the Emergency Department, among others. Provision of Anaesthesiology services will include sedation and general anaesthesia.

| | Domain | KSA | Expected Standards | Assessment |
|------------------------|--------|-----|--|------------|
| | | | GENERAL PRINCIPLES | |
| AO_M_1 <u>SALUS</u> | 6 | к | Discusses the indications for providing sedation and/or anaesthesia outside of the operating theatre, for example: (list of locations/various procedures) In the Magnetic Resonance Imaging ('MRI')/CT scanner For ultra-sound guided percutaneous procedures For diagnostic and therapeutic radiologic procedures in the Interventional Radiology Department (cardiac catheterisation) For gastrointestinal endoscopic procedures (ERCP) For procedures in the Emergency Department (e.g. closed reduction of fracture, closed reduction of dislocation of joint) For procedures in the ICU For cardioversion in coronary care units For electroconvulsive therapy in psychiatric units For in vitro fertilization | FCAI |
| AO_M_2 <u>SALUS</u> | 1 | К | Discusses the challenges in providing safe sedation/anaesthesia at a remote location including Limited space, lighting and patient access Monitors and equipment which may be old or unfamiliar Lack of piped medical gas supply and scavenging Lack of trained anaesthetic assistance and lack of immediate back-up Environmental hazards, such as ionising radiation, magnetic field, noise The need to plan for adequate equipment, supplies and drugs for unanticipated scenarios The need for collaboration and effective communication with procedural staff | CBD |
| AO_M_3 | 5 | А | Demonstrates appropriate preparation for the challenges of providing safe sedation/anaesthesia in remote locations | Mini-CEX |
| AO_M_4 | 3,4 | А | Collaborates and communicates effectively with procedural staff | Mini-CEX |
| AO_M_5 SALUS | 1 | К | Explains the general safety precautions and equipment requirements in specific environments, e.g. MRI suites | FCAI |
| AO_M_6 | 6 | К | Describes the specific anaesthetic implications of imaging techniques including but not limited to: MRI scanning CT scanning Angiography | CBD |
| AO_M_7 <u>SALUS</u> | 1 | К | Explains the implications of exposing the pregnant or potentially pregnant patient or staff member to ionising radiation | MCAI |
| AO_M_8 | 8 | К | Discusses the indications for and contraindication to cardioversion | CBD |

| | Domain | KSA | Expected Standards | Assessment |
|-------------------------|--------|-----|--|------------|
| | | | GENERAL PRINCIPLES CONTINUED | |
| AO_M_9 | 2 | К | Discusses the choice of anaesthetic agent and technique for cardioversion | CBD |
| AO_M_10 <i>SALUS</i> | 1 | К | Discusses the special considerations for emergency cardioversion | FCAI |
| AO_M_11 | 6 | К | Describes the common comorbidities of patients presenting for electro-convulsive therapy ('ECT') and their preoperative assessment Knows the contra-indications for ECT | FCAI |
| AO_M_12 | 6 | К | Describes the physiological and physical responses to ECT | CBD |
| AO_M_13 | 6 | К | Describes the anaesthetic technique and drugs used for ECT | CBD |
| | | | REGARDING SEDATION | |
| AO_M_14 | 6 | к | Can explain: What is meant by conscious sedation and why understanding the definition is crucial to patient safety The differences between conscious sedation, deep sedation and general anaesthesia The fundamental differences in techniques /drugs used /patient safety That the significant risks to patient safety associated with sedation technique requires meticulous attention to detail, the continuous presence of a suitably trained individual with responsibility for patient safety, safe monitoring and contemporaneous record keeping | MCAI |
| AO_M_15 | 6 | К | Can explain to a patient the risks and benefits of conscious sedation, including awareness during procedures Manages patient expectations and reactions during conscious sedation | DOPS |
| AO_M_16 | 6 | К | Describes the pharmacology of drugs commonly used to produce sedation | MCAI |
| AO_M_17 | 6 | К | Explains the need for and means of monitoring the sedated patient including the use of commonly used sedation scoring systems | FCAI |
| AO_M_18 | 6 | К | Describes how drugs should be titrated to effect and how the use of multiple drugs with synergistic actions can reduce the therapeutic index and hence the margin of safety | FCAI |
| AO_M_19 | 6 | К | Describes the importance of recognising the following when multiple drug techniques are employed: Increased potential for adverse outcomes when two or more sedating /analgesic drugs are administered The importance of titrating multiple drugs to effect whilst recognising that the possibility of differing times of onset, peak effect and duration, can result in an unpredictable response Knowledge of each drugs time of onset, peak effect, duration of action and potential for synergism | MCAI |
| AO_M_20 | 6 | К | Discusses which sedative drugs should be avoided and/or given with caution in the elderly | CBD |
| AO_M_21 | 6 | К | Can explain the minimal monitoring required during pharmacological sedation | FCAI |
| AO_M_22 | 6 | К | Can explain the use of single drug, multiple drug and inhalation techniques | FCAI |

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-----|--|------------|
| | | | REGARDING SEDATION CONTINUED | |
| AO_M_23 | 8 | S | Is able to provide propofol TCI (targeted controlled infusion) for sedation utilising standard appropriate monitoring e.g. O2 Saturation, Blood Pressure, ECG, ETCO2 (end tidal carbon dioxide) | DOPS |
| AO_M_24 | 6 | К | Explains the need for robust recovery and discharge criteria when conscious sedation is used for outpatient procedures and the importance of ensuring appropriate escort arrangements are in place [cross ref day surgery] | FCAI |
| AO_M_25 | 8 | S | Selects and performs a technique for sedation for simple procedures | DOPS |
| | | | TOTAL INTRAVENOUS ANAESTHESIA | |
| AO_M_26 | 6 | К | Outlines the principles of TIVA, including but not limited to Anaesthetic agents suitable for TIVA Pharmacodynamic models for TIVA Minimum safe equipment for providing TIVA Depth of Anaesthesia monitoring e.g. BIS/EEG (bi-spectral index / electro encephalogram) | FCAI |
| AO_M_27 | 8 | S | Discusses guidelines available for TIVA Discuss the risks (including awareness) and benefits of TIVA | CBD |
| AO_M_28 | 8 | К | Demonstrates safe and appropriate use of Total Intravenous Anaesthesia Manages the clinical environment, and demonstrates appropriate interaction with nursing and surgical colleagues Keeps accurate and legible notes | Mini-CEX |

| Volume of Practice | | | | | |
|-------------------------------------|----------------------------|-------------|--|--|--|
| ECT Cardioversion | | | | | |
| Sedation Total minimum VOP: | | | | | |
| Workplace Based Assessments | | | | | |
| Required Workplace based assessment | | | | | |
| Available WBAs | CBD: DOPS: Mini-CEX: | 8 3 3 | | | |

Regional Anaesthesia (ii) - Peripheral Nerve Blockade

Description:

After completing this unit, the trainee will demonstrate sufficient skill to deliver safe regional anaesthetic care. They will have sufficient knowledge and skills to perform regional anaesthesia as for both anaesthesia and analgesia

| | Domain | KSA | Expected Standards | Assessment |
|-----------------|--------|-----|--|------------|
| | | | PRE-PROCEDURE | |
| RP_M_1 SALUS | 1,2 | А | Obtains consent Accepts the right of the patient to decline regional anaesthesia, even when there are clinical advantages | DOPS |
| RP_M_2 | 4,8 | S | Conducts appropriate patient assessment and identifies risk factors and preoperative medical interventions | DOPS |
| RP_M_3 SALUS | 1,8 | А | Demonstrates safety for the procedure Ensures the site of surgery is marked | DOPS |
| RP_M_4 SALUS | 1,8 | К | Discusses advantages and disadvantages of peripheral regional anaesthesia | FCAI |
| RP_M_5 | 6,8 | К | Discusses indications and contra-indications- including relative and absolute | MCAI |
| RP_M_6 | 4,8 | К | Demonstrates list planning to allow time for the conduct of a block and for it to takeeffect | Mini-CEX |
| RP_M_7 | 5,4 | А | Shows good communication skills towards the patients and staff during the use of regional blockade | Mini-CEX |
| | | | PROCEDURE | |
| RP_M_8 | 6, 8 | К | Describes the anatomy, including anatomical landmarks, relevant to peripheral nerve blockade. Describes indications and complications for each of the blocks. Performs select peripheral regional blocks listed under ultrasound guidance. Major nerve blocks Brachial plexus: inter-scalene, supraclavicular, axillary approach Lumbar plexus block: femoral, fascia iliaca approaches Sciatic nerve block: sub gluteal, popliteal Paravertebral block Abdominal wall block: QL (quadratus lumborum), TAP (transversus abdominis plane), rectus sheath Minor nerve blocks Superficial cervical plexus blocks Intercostal nerve blocks Penile nerve blocks Penile nerve blocks Peripheral blocks of the upper limb: wrist, digital Peripheral blocks of the lower limb: ankle IVRA (intra-venous regional anaesthesia - Bier's block) | MCAI |

| | Domain | KSA | Expected Standards | Assessment |
|-----------------------------------|--------|-----|--|------------|
| | | | PROCEDURE CONTINUED | Assessment |
| RP_M_9 | 8 | К | Performs select peripheral regional blocks listed under ultrasound guidance. Major nerve blocks Brachial plexus: inter-scalene, supraclavicular, axillary approach Lumbar plexus block: femoral, fascia iliaca approaches Sciatic nerve block: sub gluteal, popliteal Paravertebral block Abdominal wall block: QL (quadratus lumborum), TAP (transversus abdominis plane), rectus sheath Minor nerve blocks Superficial cervical plexus blocks Intercostal nerve blocks Inguinal nerve blocks Penile nerve blocks Peripheral blocks of the upper limb: wrist, digital Peripheral blocks of the lower limb: ankle IVRA (intra-venous regional anaesthesia - Bier's block) | DOPS |
| RP_M_10 | 6 | К | Discusses the pharmacology of local anaesthetic agents including Mechanism of action Toxicity Use of adjuvants | MCAI |
| RP_M_11 | 2,8 | К | Describes the selection and performance of regional techniques, as influenced by patient factor, co-morbidities and surgical procedure | FCAI |
| RP_M_12 | 4,8 | S | Shows the ability to correctly manage the theatre environment with an awake or sedated patient Understands methods of sedation used in conjunction with regional anaesthesia Shows consideration for the views of patients, surgeons and theatre team with regard to surgery under regional blockade Demonstrates methods of sedation in conjunction with regional anaesthesia Manages patients with combined general and regional anaesthesia | Mini-CEX |
| RP_M_13 (<mark>SALUS</mark>) | 1,7 | S | Demonstrates safety during the blockade, including: Confirming the markings for site of surgery Attaching appropriate monitoring Establishing IV ('intra-venous') access prior to procedure Positioning of the patient Identifying the anatomical landmarks Using aseptic technique Selecting appropriate needle Selecting, checking, drawing up, diluting and labelling of drugs for injection Checking for inadvertent intravenous and intraneural administration with ultrasound | Mini-CEX |
| RP_M_14 | 6 | К | Recalls basic relevant physics and clinical application of ultrasound to regional anaesthesia | MCAI |
| RP_M_15 | 8 | S | Uses ultrasound to image the anatomy and facilitate block performance | DOPS |
| RP_M_16 | 6 | К | Describes the use of a nerve stimulator to identify appropriate needle location | MCAI |
| RP_M_17 | 2,8 | S | Assesses the adequacy of a regional technique and outlines management of incomplete or failed regional blockade and rescue techniques | DOPS |
| RP_M_18 | 6,8 | К | Describes the management of local anaesthetic toxicity | MCAI |

| | Domain | KSA | Expected Standards | Assessment |
|-------------------------|--------|-----|--|------------|
| | | | PROCEDURE CONTINUED | |
| RP_M_19 <i>SALUS</i> | 1,5 | S | Documents the procedure and any complications | DOPS |
| | | | POST-PROCEDURE | |
| RP_M_20 | 1,6 | К | Lists advantages and disadvantages of regional anaesthesia for post- operative analgesia | MCAI |
| RP_M_21 | 4,6 | К | Outlines when continuous infusions are required in the post-operative period | FCAI |
| RP_M_22 SALUS | 1,8 | К | Discusses the investigations and management of patients who have developed complications as a result of regional anaesthesia, including nerve injury | MCAI |
| RP_M_23 | 5,8 | К | Describes problems and solutions to obtaining adequate post-operative analgesia in the ward or home when regional anaesthesia wears off | CBD |
| RP_M_24 SALUS | 1,5 | К | Knows the criteria for safe discharge of a patient under regional blockade | CBD |
| RP_M_25 SALUS | 1,7 | А | Understands the need to review patients following regional technique to ensure patient is aware of safety measures until the block has worn off | CBD |

| Volume of Practice | Volume of Practice | | | | | |
|---|--------------------|--|--|--|--|--|
| Lower Limb blocks | | | | | | |
| Upper limb blocks Other (trunk/thorax) Total minimum VOP: | | | | | | |
| Workplace Based Assessments | | | | | | |
| Required Workplace based assessment | | | | | | |
| Available WBAs CBD: DOPS: Mini-CEX: | | | | | | |

Anaesthesia for Ophthalmic Surgery

Description:

After completing this unit, the trainee will demonstrate sufficient skill to deliver safe regional and general anaesthetic care to the patient requiring ophthalmic surgery.

| | Domain | KSA | Expected Standards | Assessment |
|------------------------|--------|-----|--|------------|
| | | | PRE-OPERATIVE | |
| OP_M_1 SALUS | 1,8 | S | Discusses the peri-operative assessment of the ophthalmic patient Discusses associated co-morbidities Outlines opportunities to optimise high risk patients | FCAI |
| OP_M_2 | 6 | S,K | Recognises that elderly patient present commonly for ophthalmic surgery Describes changing physiology of the elderly Describes altered pharmacology with the elderly | FCAI |
| OP_M_3 <i>SALUS</i> | 1,2 | К | Discusses the special requirements for children undergoing ophthalmic procedures | CBD |
| OP_M_4 | 2,5 | S | Discusses how patient factors and co-morbidities influence choice of anaesthesia technique | CBD |
| OP_M_5 | 6 | К | Discusses the anaesthetic implications of ophthalmic drugs used Local anaesthetic agents, Vasoconstrictors Mydriatics, miotics Intra-ocular pressure-reducing agents | FCAI |
| OP_M_6 | 6 | К | Describes the physiological mechanisms which control ocular pressure | FCAI |
| OP_M_7 | 6 | К | Discusses the drugs which alter intra-ocular pressure | FCAI |
| OP_M_8 | 5 | S | Discusses choice of regional vs general anaesthesia for ophthalmic surgery, including but not limited to Cataract surgery Strabismus surgery Glaucoma surgery Vitreoretinal surgery Oculoplastic surgery | FCAI |
| | | | INTRA-OPERATIVE | |
| OP_M_9 SALUS | 1 | А | Applies the safe site surgery checklist to prevent wrong site surgery | DOPS |
| OP_M_10 SALUS | 1,6 | S | Discusses precautions for revision surgery in patients who have had intra-ocular gas | FCAI |
| OP_M_11 | 8 | S | Discusses the anaesthetic technique for penetrating eye injury | CBD |
| OP_M_12 | 6 | К | Describes advantages and disadvantages of sedation in ophthalmic procedures | CBD |
| OP_M_13 | 8 | К | Describes the ocular reflexes and their management ocular-cardiac ocular-respiratory ocular-emetic | FCAI |

| | Domain | KSA | Expected Standards | Assessment |
|-----------------------------------|--------|-----|---|------------|
| | | | INTRA-OPERATIVE CONTINUED | |
| OP_M_14 | 5 | К | Discusses the national guidelines regarding local anaesthesia for intra-ocular surgery | FCAI |
| OP_M_15 | 6 | К | Recalls the relevant anatomy for local anaesthetic block | FCAI |
| OP_M_16 | 8 | К | Describes the technique of local anaesthesia for ophthalmic surgery, including indications, advantages and disadvantages. Topical Superficial injection: subconjunctival extraconal, intraconal, sub-tenons | CBD |
| OP_M_17 | 8 | S | Performs local anaesthesia for ophthalmic surgery | DOPS |
| OP_M_18 SALUS | 1 | К | Describes the risks associated with needle block | FCAI |
| OP_M_19 | 8 | S | Discusses methods to decrease intra-ocular pressure rise after local anaesthesia | CBD |
| OP_M_20 (<mark>SALUS</mark>) | 1 | К | Describes precautions and safety procedures for laser therapy during ophthalmic surgery | FCAI |
| | | | POST-OPERATIVE | |
| OP_M_21 | 2,8 | К | Outlines specific factors in the post-operative period for patients who have had ophthalmic surgery | FCAI |
| OP_M_22 SALUS | 1 | А | Understands and describes the need to review patients following regional technique to ensure block has worn off and there are no residual complications | CBD |

| Volume of Practice | | | | | |
|---|--|--|--|--|--|
| Regional Anaesthetics General Anaesthetics | | | | | |
| Total minimum VOP: | | | | | |
| Workplace Based Assessments | | | | | |
| Required Workplace based assessment | | | | | |
| CBD: Available WBAs DOPS: | | | | | |
| Mini-CEX: | | | | | |

Anaesthesia for Otolaryngology, Oral and Maxillofacial, Head and Neck Surgery

Description:

By the completion of this specialised unit, the trainee will be able to provide anaesthesia for patients undergoing ear, nose and throat, maxillo-facial, head and neck or dental surgery. They will be able to anticipate the issues relating to and manage the shared airway.

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|--|------------|
| EN_M_1 | 6 | К | Describes the common co-morbidities and patient factors encountered in patients having head and neck and ear, nose and throat procedures | MCAI |
| EN_M_2 | 6 | S | Discusses full assessment of the airway in patients for ear, nose throat and head and necksurgery | MCAI |
| EN_M_3 | 8 | К | Discusses the recognition and anaesthetic implications of obstructive sleep apnoea in adults andchildren Outline the need for post-operative CPAP (continuous positive airway pressure) | CBD |
| EN_M_4 | 6 | К | Discusses the considerations of the shared airway and its implications for anaesthesia | MCAI |
| EN_M_5 | 8 | К | Describes the indications for and features of special endotracheal tubes used in ear nose throat surgery, including: Microlaryngoscopy Thyroid surgery Laser surgery | MCAI |
| EN_M_6 | 8 | К | Discusses the anaesthetic management of patients requiring common elective ear nose and throat procedures including: Septo-rhinoplasty Functional endoscopic sinus surgery (FESS) Tonsillectomy and/or adenoidectomy Microlaryngoscopy Panendoscopy Insertion of Grommets Myringoplasty or other middle ear surgery Mastoidectomy Laryngectomy Parotidectomy Neck dissection Tracheostomy | MCAI |
| EN_M_7 | 8 | К | Discusses the perioperative anaesthetic management of patients requiring thyroid or parathyroid surgery | CBD |
| EN_M_8 | 8 | S | Discusses the recognition and anaesthetic management of patients requiring common emergency ear, nose and throat procedures including: Reduction of fractured nose Removal of inhaled foreign body Removal of foreign body from the oesophagus or pharynx Surgical management of the obstructed upper airway Drainage of oropharyngeal cyst or abscess, including quinsy abscess Infections of the upper airway (croup, epiglottitis) | FCAI |
| EN_M_9 | 8 | К | Discusses anaesthesia for patients undergoing dental restoration and/or extraction | FCAI |
| EN_M_10 SALUS | 1 | К | Discusses the precautions, possible complications and anaesthetic implications of laser surgery of the airway | CBD |

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-----|---|------------|
| EN_M_11 | 1 | К | Discusses management of an airway fire | FCAI |
| EN_M_12 | 8 | S | Performs inhalational induction of anaesthesia | DOPS |
| EN_M_13 | 8 | S | Performs nasal intubation | DOPS |
| EN_M_14 | 8 | S | Performs fibreoptic intubation | Mini-CEX |
| EN_M_15 | 6 | К | Describes options for topical anaesthesia and sedation for awake fibreoptic intubation | FCAI |
| EN_M_16 | 6 | К | Discusses management of the airway during maxillo-facial surgery | FCAI |
| EN_M_17 | 6 | К | Discusses the anaesthetic management of patients with a fractured mandible and zygomatico-maxillary complex | FCAI |
| EN_M_18 | 6 | К | Discusses anaesthesia for repair of Le Fort facial fracture | FCAI |
| EN_M_19 | 6 | К | Discusses anaesthesia for Le Fort osteotomy and Maxillomandibular advancement surgery. | FCAI |
| EN_M_20 | 8 | К | Discusses the perioperative anaesthetic management of bleeding post tonsillectomy | MCAI |
| EN_M_21 | 8 | К | Discusses the recognition and emergency management of the obstructed airway including emergency front of neck access via cricothyroidotomy or awake surgical tracheostomy | MCAI |
| EN_M_22 | 6 | К | Discusses the anaesthetic implications of previous surgery and radiotherapy to the airway | FCAI |
| EN_M_23 | 6 | К | Discusses the perioperative management of patients with head and neck cancer | CBD |
| EN_M_24 | 6 | К | Discusses the use and risks of jet ventilation for shared airway procedures (tension pneumothorax, air embolism surgical emphysema etc.) | FCAI |
| EN_M_25 | 6 | К | Discusses the use of induced hypotension for otolaryngology and head and neck surgery | FCAI |
| EN_M_26 | 6 | S | Discusses methods for smooth emergence and safe extubation following ear nose throat and head and neck procedures. Discuss methods to assess that an airway is safe to extubate after a procedure. | FCAI |
| EN_M_27 | 1 | S | Is aware of advanced airway management techniques (Airway exchange catheters or submental intubation) for the management of the anticipated difficult airway | FCAI |

| Volume of Practice | | | | | | |
|---|-----------------------------|----|--|--|--|--|
| Tonsillectomy and/or adenoidectomy | | 10 | | | | |
| Airway surgery | | | | | | |
| May include: | | | | | | |
| Laser airway surgery | | | | | | |
| Microlaryngoscopy Domoval of foreign body from upper/lower pin | | | | | | |
| Removal of foreign body from upper/lower airv Tracheostomy | Nay | | | | | |
| Head and necksurgery | | | | | | |
| Nasal surgery | 1 | | | | | |
| Thyroidectomy/parathyroidectomy | | | | | | |
| Myringoplasty/middle ear surgery | | | | | | |
| Neck dissection | | 1 | | | | |
| Mandibular fracture | | 1 | | | | |
| Total minimum VOP | Total minimum VOP | | | | | |
| Workplace Based Assessments | Workplace Based Assessments | | | | | |
| Required Workplace based assessment | | | | | | |
| | CBD: | 4 | | | | |
| Available WBAs | DOPS: | 2 | | | | |
| | Mini-CEX: | 1 | | | | |

Anaesthesia for Vascular Surgery

Description:

By the completion of this unit, the trainee will be able to provide anaesthesia for patients requiring vascular anaesthesia of moderate complexity.

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-----|--|------------|
| | | | POSSESS BASIC SCIENTIFIC AND CLINICAL KNOWLEDGE | |
| VA_M_1 | 6 | К | Explains the effect of smoking on health | FCAI |
| VA_M_2 | 6 | К | Explains the principles and anaesthetic implications of sympathectomy | FCAI |
| VA_M_3 | 6 | К | Explains the principles of blood conservation and cell salvage when major haemorrhage is predicted | FCAI |
| VA_M_4 | 6 | К | Discusses methods to minimise blood loss and transfusion requirements in aortic surgery | CBD |
| VA_M_5 | 6 | К | Describes the impact of vascular disease on Wound healing Positioning injury Peri-operative stroke, myocardial ischaemia, renal failure | CBD |
| | | | PATIENT ASSESSMENTS AND PRE-OPERATIVE INTERVENTIONS | |
| VA_M_6 | 6 | К | Describes the perioperative management for a patient for major vascular surgery | FCAI |
| VA_M_7 | 6 | К | Explains morbidity and mortality associated with vascular surgery | FCAI |
| VA_M_8 | 6 | К | Lists the methods to assess a patient's functional cardiovascular capacity | FCAI |
| VA_M_9 | 2,6 | К | Explains the preoperative management of a patient with atherosclerotic disease | FCAI |
| VA_M_10 | 2,6 | K,S | Describes post-operative management and critical care of vascular patients | FCAI |
| VA_M_11 | 5,6 | К | Discusses risks and benefits of regional anaesthesia and analgesia in vascular surgery | CBD |
| VA_M_12 | 3,6 | S | Outlines the assessment of the patient with co-existing disease | CBD |
| | | | DEMONSTRATES APPROPRIATE SKILLS AND MANAGEMENT IN SPECIFIC AREAS OF VASCULAR ANAESTHESIA | |
| VA_M_13 | 5 | K,S | Discusses prevention, diagnosis and management of perioperative complications, including but not limited to Major haemorrhage Reperfusion syndromes Myocardial ischaemia Stroke Thromboembolism Acute renal impairment Spinal cord ischaemia Rhabdomyolysis Post amputation pain | FCAI |

| | Domain | KSA | Expected Standards | Assessment |
|-------------------------------|--------|-----|---|------------|
| | | | DEMONSTRATES APPROPRIATE SKILLS AND MANAGEMENT IN SPECIFIC AREAS OF VASCULAR ANAESTHESIA CONTINUED | |
| VA_M_14 SALUS | 1,5 | К | Discusses the advantages and disadvantages of interventional radiological procedures vs open procedures | FCAI |
| VA_M_15 (<u>\$41,0</u> \$ | 1, 5,6 | к | Specific Procedures Carotid endarterectomy Explains the benefits and risks of general vs regional anaesthesia Carotid clamping and unclamping Management of cerebral ischaemia Outlines recovery room complications and management | FCAI |
| VA_M_16 | 6 | К | AAA (abdominal aortic aneurysm) Explains the pathophysiology of cross-clamping and renal protection strategies Describes resuscitation and management of emergency AAA (abdominal aortic aneurysm) | FCAI |
| VA_M_17 <i>Salus</i> | 1,6 | K,S | Describes the management of patients for endovascular radiological procedures Discusses reaction to IV contrast, high radiation dose | FCAI |
| VA_M_18 | 6,8 | К | Discusses general vs regional anaesthesia for lower limb amputation | CBD |
| VA_M_19 | 6,8 | К | Provides anaesthesia for lower limb amputation | DOPS |
| VA_M_20 | 6,8 | К | Discusses general vs regional anaesthesia for upper limb vascular surgery | CBD |
| VA_M_21 | 6,8 | S | Provides anaesthesia for upper limb vascular surgery | DOPS |

| Volume of Practice | | | | | | | |
|--|------------------------|---|--|--|--|--|--|
| Carotid endarterectomy | | 5 | | | | | |
| Open surgery for peripheral vascular disease | | 5 | | | | | |
| Major limb amputation | | 5 | | | | | |
| AV fistula formation | | 2 | | | | | |
| Abdominal aortic surgery | | 5 | | | | | |
| Interventional radiological procedures | | | | | | | |
| Total minimum VOP: | | | | | | | |
| Workplace Based Assessments | | | | | | | |
| Required Workplace based assessment | | | | | | | |
| | CBD: | 6 | | | | | |
| Available WBAs | DOPS: | 2 | | | | | |
| Mini-CEX: | | | | | | | |
| Courses | | | | | | | |
| Course | Vascular Access Course | | | | | | |

Anaesthesia for Neurosurgery and Neuroradiology

Description:

By the completion of this unit, the trainee will be competent in providing anaesthesia for patients requiring neurosurgical and interventional neuroradiology procedures of moderate complexity, as well as in providing perioperative and neurocritical care for patients with neurotrauma.

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|--|------------|
| | | | TRAUMATIC BRAIN INJURY AND OTHER NEUROCRITICAL CONDITIONS | |
| NR_M_1 | 6 | К | Outlines relevant neuroanatomy including: Central nervous system Spinal cord and meninges Cerebrospinal fluid Blood supply to the brain and spinal cord Blood-brain barrier | MCAI |
| NR_M_2 | 6 | К | Describes the physiological and metabolic effects of anaesthetic drugs and techniques on the brain and spinal cord | FCAI |
| NR_M_3 SALUS | 1 | К | Discusses the principles and strategies of cerebral protection | FCAI |
| NR_M_4 | 6 | к | Outlines the principles of clinical measurement and monitoring relevant to the neurocritical setting | FCAI |
| NR_M_5 | 6 | К | Outlines the principles of anaesthesia and intensive care for patients with head injury | FCAI |
| NR_M_6 | 8 | S | Describes the level of consciousness according to Glasgow Coma Scale | MCAI |
| NR_M_7 | 8 | S | Discusses the recognition and management of the unstable cervical spine | CBD |
| NR_M_8 | 8 | S | Performs a basic neurological examination for assessment of neurological deficits | DOPS |
| NR_M_9 | 6 | К | Describes the typical presentation and natural history of the main types of intracranial haemorrhage | CBD |
| NR_M_10 | 6 | К | Explains the signs, symptoms and management of raised intracranial pressure | CBD |
| NR_M_11 SALUS | 1 | К | Discusses the pathophysiology and management of secondary brain injury | FCAI |
| NR_M_12 | 6 | К | Describes grading systems for subarachnoid haemorrhage | FCAI |
| NR_M_13 | 8 | К | Understands and describes management of cerebral vasospasm | FCAI |
| NR_M_14 | 8 | К | Explains the pathophysiology and management of common sodium disturbances associated with brain injury and neurosurgery | FCAI |
| NR_M_15 | 8 | К | Describes spinal cord injury and its complications | FCAI |
| NR_M_16 | 6 | К | Discusses brainstem death and brainstem death testing (ICSI guidelines) | FCAI |
| NR_M_17 | 6 | К | Outlines the management of the organ donor | FCAI |

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|--|------------|
| | | | CLINICAL NEUROANAESTHESIA | |
| NR_M_18 Salus | 1 | К | Discusses the implications for anaesthesia and the risks associated with the positions used for neurosurgery | CBD |
| NR_M_19 | 6 | к | Describes the anatomy relevant to providing local anaesthesia for awake craniotomy | FCAI |
| NR_M_20 | 6 | К | Describes the principles of anaesthesia and perioperative care of patients for: Supratentorial surgery Posterior fossa surgery Pituitary surgery Epilepsy surgery Awake craniotomy Craniafacial and craniobasal surgery Spinal surgery, including emergency spinal cord decompression Ventriculo-peritoneal shunts Imaging and interventional neuroradiological procedures | CBD |
| NR_M_21 | 6 | К | Explains the anaesthetic implications of pituitary disease including endocrine effects and trans-sphenoidal surgery | FCAI |
| NR_M_22 | 8 | S | Provides anaesthesia for patients requiring craniotomy | Mini-CEX |
| NR_M_23 | 8 | S | Provides anaesthesia for a patient requiring burr hole evacuation surgery | DOPS |
| NR_M_24 | 8 | S | Provides anaesthesia for cerebrospinal fluid shunt surgery | DOPS |
| NR_M_25 | 8 | S | Provides anaesthesia for spinal decompression surgery | DOPS |
| NR_M_26 | 8 | S | Provides anaesthesia for spinal surgery | DOPS |
| NR_M_27 | 6 | К | Discusses the principles of anaesthesia for posterior fossa surgery | FCAI |
| NR_M_28 | 8 | К | Explains recognition and management of air embolism | FCAI |
| NR_M_29 | 8 | К | Discusses the anaesthetic principles of anaesthesia for intracranial aneurysm repair (clipping and coiling) | CBD |
| NR_M_30 SALUS | 1 | К | Understands and describes the challenges of providing anaesthesia for interventional neuroradiology procedures | FCAI |

| Allocation | Allocation | | | | | | |
|---|--|--|--|--|--|--|--|
| 1 Month in accre | dited neurosurgical unit | | | | | | |
| Volume of Practi | ce | | | | | | |
| - | Neurosurgical and neuroradiological procedures: 25 Must include: minimum craniotomy (15) May include: burr hole procedures, interventional neuroradiological procedures for intracranial vascular pathology 25 | | | | | | |
| Spinal surgeries: Total minimum VOP: | | | | | | | |
| Workplace Base | Workplace Based Assessments | | | | | | |
| Required Workplace based assessment | | | | | | | |
| Available WBAs CBD: DOPS: Mini-CEX: | | | | | | | |

Anaesthesia for Cardiac and Thoracic Surgery

Description:

By the completion of this unit, the trainee will be able to provide anaesthesia for patients requiring cardiac and/or thoracic surgery of moderate complexity.

| | Domain | KSA | Expected Standards | Assessment |
|------------------------|--------|-----|---|------------|
| | | | PRE-OPERATIVE | |
| ст_М_1 | 8 | S | Conducts an appropriate patient assessment and identifies risk factors and required pre-operative interventions including Myocardial ischaemia, arrhythmias, filling status, left ventricular systolic and diastolic function, right ventricular and pulmonary artery pressure, valve pathology, shunt Considers the severity of cardiac and respiratory obstruction, and the implications for anaesthetic management | DOPS |
| CT_M_2 | 6, 8 | S | Explains the results of special investigations used during assessment of patients with cardiac disease including X-rays, Echocardiography, Scanning techniques such as CT, MRI, Cardiac MRI, Dipyrimadamole Stress Thallium, Coronary angiography | FCAI |
| CT_M_3 <i>SALUS</i> | 1,8 | К | Explains the significance of pre-operative functional investigations of respiratory and cardiac performance | FCAI |
| СТ_М_4 | 6,8 | К | Describes the pathophysiology of pulmonary hypertension and methods to manipulate pulmonary vascular resistance and pulmonary artery pressure | FCAI |
| СТ_М_5 | 6 | К | Discusses the pathophysiology of chronic obstructive pulmonary disease | FCAI |
| СТ_М_6 | 5, 8 | К | Discusses the assessment of patients with mediastinal masses for surgical procedures | CBD |
| СТ_М_7 | 4,8 | К | Describes the principles of perioperative anaesthetic management of patients for cardiac surgery | CBD |
| СТ_М_8 | 4,8 | К | Describes the initial medical management of acute thoracic aorta dissection, and outline principles for surgical repair | FCAI |
| CT_M_9 SALUS | 1,8 | S | Outlines the risk of the operation in the patient who has cardiac or respiratory disease using common scoring systems | FCAI |
| | | | CARDIAC ANAESTHESIA | |
| СТ_М_10 | 4,6,8 | S | Demonstrates the appropriate clinical skills and management skills of general anaesthesiologist for coronary artery bypass graft and valvular repair/replacement | Min-CEX |

| | Domain | KSA | Expected Standarde | Assessment |
|---------|--------|-----|--|------------|
| | Domain | КЭА | Expected Standards | Assessment |
| | | | CARDIAC ANAESTHESIA CONTINUED | |
| | | | Understands and explains the principles of cardiopulmonary bypass including the use of cardioplegia Describes maintenance of anaesthesia on bypass | |
| CT_M_11 | 4,6,8 | S | Outlines the implications of aortic disease for aortic cannulation Describes the haematological and inflammatory effects of bypass Describes reperfusion injury and ischaemic preconditioning Describes methods to cool and rewarm patients during cardiac surgery, and the complications of thermoregulation Describes the physiology of hypothermia and deep hypothermic cardiac arrest Describes a strategy to manage the patient who is difficult to wean from bypass Describes anaesthetic and surgical problems associated with off-pump cardiac surgery | FCAI |
| CT_M_12 | 8 | S | Describes the indications for invasive and non-invasive cardiac monitoring, and interpret common findings Explains means to estimate cardiac output Describes pulmonary artery catheter principles and interprets data | FCAI |
| CT_M_13 | 6 | К | Lists indications for applying external defibrillator pads prior to surgery Describes the use of internal defibrillator pads | CBD |
| CT_M_14 | 4,8 | К | Explains the need and method for altering blood coagulability during cardiac surgery Including anticoagulation and point of care testing, use of antifibrinolytics and management of protamine reaction Describes an approach to a patient with HITTS (heparin induced thrombotic thrombocytopaenia syndrome) | FCAI |
| CT_M_15 | 8 | К | Describes the indications for cardiac pacing, and list the options available Including transvenous, external, epicardial pacing Outline the principles of programming cardiac pacemakers Outlines pacing modes and terminology and abbreviations commonly used | FCAI |
| CT_M_16 | 4,6 | К | Describes the principles of the intra-aortic balloon pump and other assist devices | FCAI |
| CT_M_17 | 8 | К | Discusses the use of echocardiography in cardiac anaesthesia Outlines basic haemodynamic assessment using TOE/TTE (transesophageal echocardiogram / trans thoracic echocardiogram) Discusses the role of echocardiography in the haemodynamically unstable patient | CBD |
| | | | THORACIC SURGERY | |
| CT_M_18 | 7,8 | S | Demonstrates the appropriate clinical and management skills of general anaesthesiologist in providing anaesthesia for lobectomy/pneumonectomy | Mini-CEX |
| CT_M_19 | 7,8 | S | Discusses clinical and management skills of general anaesthesiologist in providing anaesthesia for cardiothoracic trauma | CBD |
| СТ_М_20 | 4,8 | К | Describes commonly performed thoracic procedures and relevant anaesthetic problems | FCAI |
| CT_M_21 | 4,8 | К | Describes common methods of local and general anaesthesia for bronchoscopy Include techniques of ventilation | FCAI |

| | Domain | KSA | Expected Standards | Assessment |
|---------|--------|-----|---|------------|
| | | | THORACIC SURGERY CONTINUED | |
| CT_M_22 | 6 | К | Explains changes in lung physiology and the implications for management that occur during one lung ventilation and strategies to mage these changes open thorax lateral decubitus positioning | CBD |
| СТ_М_23 | 6 | К | Discusses hypoxic pulmonary vasoconstriction | CBD |
| CT_M_24 | 1,8 | К | Describes indications and contra-indications and management of one lung ventilation | FCAI |
| СТ_М_25 | 6 | К | Describes the airway strategies of a patient undergoing one lung ventilation and anaesthesia, including but not limited to Placement of a double-lumentube Bronchial blockers | FCAI |
| СТ_М_26 | 6 | К | Demonstrates placement of a double-lumen tube | DOPS |
| CT_M_27 | 4,8 | К | Discusses complications of double lumen tubes and the intra-operative management | CBD |
| СТ_М_28 | 6 | К | Discusses changes that occur during one lung ventilation and principles of management | FCAI |
| СТ_М_29 | 4,6 | К | Explains the changes that occur with pneumothorax and the principles of management | FCAI |
| СТ_М_30 | 3,8 | К | Outlines critical periods during thoracic procedures that impact on anaesthetic management including airway ligation and manipulation of pulmonary vasculature | CBD |
| | | | POSTOPERATIVE | |
| CT_M_31 | 3,6 | К | Describes routine and emergent post-operative management of the cardiac surgical patient in the ICU | CBD |
| СТ_М_32 | 5,6 | К | Describes the principles and management of a patient for –`fast-track' cardiac surgery | CBD |
| СТ_М_33 | 4,8 | К | Describes post-operative complications and management, including haemorrhage; tamponade | FCAI |
| СТ_М_34 | 4,8 | К | Describes common problems associated with the post-operative care of patients who have had thoracic surgery and methods to minimise them | FCAI |
| CT_M_35 | 4,8 | K | Discusses the management of chest drains and pleural drainage systems in the post-operative period | CBD |
| СТ_М_36 | 6 | К | Describes post-operative analgesia for cardiothoracic surgery Is aware of multimodal strategies for post-operative analgesia for thoracic surgery | CBD |
| | | | NON-CARDIAC/THORACIC SURGERY | |
| CT_M_37 | 4,8 | К | Describes the anaesthetic management of the post-transplant (lung/cardiac patient) for non-cardiac or thoracic surgery | FCAI |
| CT_M_38 | 5,6 | К | Describes the abnormalities in an adult patient with congenital heart disease Including corrected, partially corrected, and uncorrected Discusses the implications for anaesthesia in these patients | FCAI |

| Allocation | | | | | |
|--|--------------|---|--|--|--|
| 1 Month in accredited cardiothoratic unit | | | | | |
| Volume of Practice | | | | | |
| Cardiac Anaesthesia: total Minimum with cardiac bypass Thoracic Anaesthesia: total Minimum 2 thoracotomy Minimum 5 bronchoscopy Total minimum VOP: Workplace Based Assessments | | | | | |
| Required Workplace based assessment | | 3 | | | |
| Available WBAs CBD: DOPS: Mini-CEX: | | | | | |
| Courses | | | | | |
| Course | Echo courses | | | | |



Section Five: Specialty Modular Units



Anaesthesia and Analgesia for Obstetric Care

Description:

After completing this unit, the trainee will demonstrate sufficient skill to deliver safe perioperative anaesthetic care to the pregnant patient requiring analgesia or anaesthesia, and will recognise the need for referral for a higher level of care for the obstetric patient with a complex medical history.

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|--|------------|
| | | | BASIC SCIENTIFIC AND CLINICAL KNOWLEDGE RELEVANT TO OBSTETRIC ANAESTHESIA | |
| OB_S_1 | 6 | К | Describes changes in maternal anatomy relating to pregnancy | MCAI |
| OB_S_2 | 6 | К | Describes the changes in anatomy of the maternal airway and the implications for airway management | MCAI |
| OB_S_3 | 6 | К | Describes the changes in the anatomy of the maternal vertebral column, spinal cord and meninges relevant to the performance of neuraxial procedures | MCAI |
| OB_S_4 | 6 | К | Describes the anatomy and physiology of pain in labour and childbirth | MCAI |
| OB_S_5 | 6 | К | Describes the physiological changes that occur during pregnancy, labour and delivery in particular changes to cardiovascular, respiratory, haemato- logical and gastro-intestinal changes Describes the effect of aorto-caval compression and how to avoid it | MCAI |
| OB_S_6 | 6,8 | К | Outlines reference ranges for physiological and biochemical variables in pregnancy | MCAI |
| OB_S_7 | 6 | К | Describes pharmacology related to pregnancy and labour | MCAI |
| OB_S_8 | 6 | К | Describes the influence of pregnancy on the pharmacokinetics and pharmacodynamics of drugs commonly used in anaesthesia and analgesia | MCAI |
| OB_S_9 | 6 | К | Describes tocolytic agents including beta 2 agonists, calcium antagonists, magnesium, inhalational anaesthetics, NSAIDs | MCAI |
| OB_S_10 | 6 | К | Describes pharmacology of agents used for treatment of pre-eclampsia, including magnesium, hydralazine, labetalol | MCAI |
| OB_S_11 | 6 | К | Describes oxytocic agents including prostaglandins, ergot derivatives, oxytocin derivatives | MCAI |
| OB_S_12 SALUS | 1,6 | К | Describes clinical methods to assess for foetal health in utero | MCAI |
| OB_S_13 | 6 | К | Describes foetal and neonatal circulation and ventilation | MCAI |
| OB_S_14 | 6 | К | Explains factors that influence the transfer of drugs across the placenta | MCAI |
| OB_S_15 SALUS | 1,6 | к | Outlines potential effects on the foetus of drugs administered during pregnancy | MCAI |
| OB_S_16 SALUS | 1,6 | к | Outlines the effects on the neonate of drugs administered in association with breast feeding | MCAI |
| | | | CONDUCTS APPROPRIATE PATIENT ASSESSMENTS | |
| OB_S_17 SALUS | 1,6 | к | Identifies risk factors and required pre-operative interventions to optimise clinical condition | CBD |
| OB_S_18 | 4,8 | К | Outlines indications for referral of a high risk pregnant patient to a specialised centre of care | CBD |

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|--|------------|
| | | | ANAESTHETIC MANAGEMENT | |
| OB_S_19 | 3,6 | К | Describes anaesthetic management of early pregnancy conditions including: molar pregnancy, termination, ectopic, miscarriage, septic abortion Describes management of pregnant patient having non-obstetric surgery | FCAI |
| OB_S_20 | 2,6 | К | Describes mechanism and progress of normal labour Describes analgesic options for labour and delivery | MCAI |
| OB_S_21 | 8 | S | Performs epidural for analgesia in labour | DOPS |
| OB_S_22 SALUS | 1,2,8 | S | Outlines the principles of regional analgesia for labour Describes management of complications of regional analgesia, including: spinal tap, hypotension, hypertension, total spinal | CBD |
| OB_S_23 | 6,8 | K,S | Provides management of the complications of regional anaesthesia, including but not limited to Discussion of the complications and management options with the patient Liaison with obstetric team as appropriate Clinical investigations/interventions for management of complications | Mini-CEX |
| OB_S_24 | 6,8 | К | Understands the implications of vertebral abnormalities for neuraxial blockade | CBD |
| OB_S_25 | 6,8 | К | Demonstrates understanding of the treatment of post-dural puncture headache | FCAI |
| OB_S_26 | 3,6 | К | Discusses diagnosis and management of women with neurological deficits after neurological blockade | CBD |
| OB_S_27 | 6,8 | К | Discusses anaesthetic management of problems which may arise with normal labour and delivery - VBAC (vaginal birth after caesarean), Uterine rupture, Cord prolapse, Ante-partum haemorrhage, abruption, post-partum haemorrhage, shoul- der dystocia, Foetal death in utero | CBD |
| | | | LSCS ('LOWER SEGMENT CAESAREAN SECTION') | |
| OB_S_28 | 6 | К | Describes the grading urgency of LSCS | MCAI |
| OB_S_29 SALUS | 1,6 | К | Describes how anaesthetic techniques must be modified to the pregnant patient | MCAI |
| OB_S_30 | 1,6 | К | Explains local feeding/fasting policies and the reasons | MCAI |
| OB_S_31 | 6 | К | Describes the role of aspiration prophylaxis | MCAI |
| OB_S_32 SALUS | 1,6 | К | Explains thromboprophylaxis requirements in pregnancy, with reference to local guidelines | MCAI |
| OB_S_33 SALUS | 1,8 | S | Safely positions the pregnant patient to minimise injury and complications | DOPS |
| OB_S_34 | 6,8 | К | Describes postoperative analgesic options and techniques | CBD |
| OB_S_35 | 8 | S | Performs a general anaesthetic for LSCS | DOPS |
| OB_S_36 | 8 | S | Performs regional for LSCS | DOPS |
| OB_S_37 | 2,3,6 | К | Discusses the management of failed regional anaesthesia | CBD |
| OB_S_38 | 6 | К | Evaluates role of spinal, combined spinal-epidural and epidural for LSCS | CBD |

| | Domain | KSA | Expected Standards | Assessment |
|--------------------------------|--------|-----|--|------------|
| | | | LSCS ('LOWER SEGMENT CAESAREAN SECTION') CONTINUED | |
| OB_S_39 | 8 | S | Converts epidural analgesia for labour to anaesthesia for LSCS | DOPS |
| OB_S_40 | 6,8 | S | Describes the management of complications of neuraxial blockade including hypotension, nausea and vomiting, bradycardia, pruritis, total spinal | CBD |
| OB_S_41 | 3,8 | S | Provides anaesthesia for postpartum complications | DOPS |
| OB_S_42 | 6 | К | Describes and manages specific obstetric conditions Hypertensive disorders of pregnancy pre-eclampsia, HELLP (haemolysis, elevated liver enzyme and low platelet count), eclampsia Peripartum cardiomyopathy Gestational diabetes Fatty liver in pregnancy Explains the classification of placenta praevia and the associated risk to the patient Rhesus iso-immunisation Premature delivery Multiple pregnancy Inverted uterus | FCAI |
| | | | ANAESTHETIC MANAGEMENT OF THE OBSTETRIC PATIENT WITH SEVERE CO-EXISTING DISEASE | |
| OB_S_43 | 6 | К | Describes the influence of common concurrent medical disease on pregnancy | FCAI |
| OB_S_44 | 6 | К | Outlines the management of the obstetric patient with morbid obesity, cardiac disease, substance abuse, psychiatric conditions | FCAI |
| | | | EARLY MANAGEMENT/STABILISATION OF THE CRITICALLY ILL PREGNANT PATIENT | |
| OB_S_45 SALUS | 1 | К | Discusses basic and advanced life support in the pregnant patient | MCAI |
| OB_S_46 S <mark>ALUS</mark> | 1,8 | К | Discusses resuscitation of the pregnant patient Positioning patient to avoid aorto-caval compression Altered maternal physiological responses Maternal resuscitation as the first priority Peri-mortem caesarean section | MCAI |
| OB_S_47 | 6,8 | К | Discusses intra-uterine resuscitation of the at-risk foetus | CBD |
| OB_S_48 | 8 | S | Outlines the Recognition and management of maternal collapse including Embolism: thromboembolic, air, amniotic Anaphylaxis, local anaesthetic toxicity Massive haemorrhage Lists risk factors and describe management of major obstetric haemorrhage | FCAI |
| OB_S_49 | 6,8 | S | Discusses the recognition and management of sepsis in the obstetric patient | FCAI |
| | | | MATERNAL MORBIDITY AND MORTALITY | |
| OB_S_50 | 1,6 | К | Discusses common causes of maternal morbidity and mortality | FCAI |
| OB_S_51 SALUS | 1,6 | К | Demonstrates knowledge of national reports | FCAI |
| OB_S_52 | 2,3 | А | Discusses the sensitivity of patient choices in obstetric practice | FCAI |

| Allocation | | | | | | |
|---|-------|---|--|--|--|--|
| 3 months in an accredited obstetric unit* with 6 month obstetric on call or 6 months in a specialty obstetric hospital *Appendix 4 | | | | | | |
| Volume of Practice | | | | | | |
| LSCS (min 2 general anaesthetics); min 5 epidural top-up) Epidural for labour | | | | | | |
| Management of post-partum complication Total minimum VOP: | | | | | | |
| Workplace Based Assessments | | | | | | |
| Required Workplace based assessment | | 3 | | | | |
| Available WBAs CBD: DOPS: Mini-CEX: | | | | | | |
| Courses | | | | | | |
| Simulation | COAST | | | | | |

Anaesthesia for Paediatric Surgery

Description:

By the completion of this specialised unit, trainees will be able to independently provide anaesthesia for surgery of moderate complexity for children over two years of age without significant comorbidities. They will be able to act as a member of the multidisciplinary team for the initial resuscitation, stabilisation and transfer of critically ill children and provide acute pain management for children.

| | Domain | KSA | Expected Standards | Assessment |
|-----------------|--------|-----|--|------------|
| | | | ANAESTHESIA AND ANALGESIA FOR PAEDIATRIC SURGERY | |
| PA_S_1 | 8 | S | Conducts pre-operative assessment for children and formulates appropriate anaesthetic plan | Mini-CEX |
| PA_S_2 | 1 | К | Describes paediatric fasting guidelines | MCAI |
| PA_S_3 | 6 | К | Describes vital signs for children of different ages | MCAI |
| PA_S_4 SALUS | 1 | К | Discusses the assessment and management of a child with upper respiratory chest infection or concurrent medical illness in the preoperative period | FCAI |
| PA_S_5 | 6 | К | Describes the differences in relevant functional airway anatomy between infants, children and adults | MCAI |
| PA_S_6 SALUS | 1 | К | Discusses the clinical features, possible causes and management of upper airway obstruction including laryngospasm | FCAI |
| PA_S_7 SALUS | 1 | К | Discusses the clinical features of the child with critical airway obstruction and outlines a managementplan | CBD |
| PA_S_8 SALUS | 1 | К | Discusses the clinical features associated with the difficult paediatric airway | MCAI |
| PA_S_9 | 6 | К | Discusses the clinical features and anaesthetic implications of the following medical conditions: Prematurity and the ex-premature infant Asthma Cystic fibrosis Sleep apnoea Croup Epiglottitis Bronchiolitis Congenital heart disease Muscular dystrophies Down syndrome Cerebral palsy Autism Obesity Diabetes Malignant Hyperthermia Post tonsillectomy haemorrhage | FCAI |
| PA_S_10 | 2 | К | Discusses options for preoperative anxiety management | MCAI |
| PA_S_11 | 3 | S | Communicates effectively: with children at their level using age appropriate language with parents/carers of children in an appropriate manner | Mini-CEX |

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|--|------------|
| | | | ANAESTHESIA AND ANALGESIA FOR PAEDIATRIC SURGERY CONTINUED | |
| PA_S_12 | 3 | А | Involves parents/carers in perioperative management plans for children | DOPS |
| PA_S_13 | 3 | А | Uses different strategies (communication, play, distraction) to optimise induction of anaesthesia inchildren | DOPS |
| PA_S_14 | 2 | К | Discusses appropriateness of inhalational versus intravenous anaesthesia induction | MCAI |
| PA_S_15 | 8 | S | Conducts inhalational induction in children | DOPS |
| PA_S_16 | 8 | S | Conducts intravenous induction in children | DOPS |
| PA_S_17 | 8 | S | Performs effective face mask ventilation in children and infants and demonstrates use of appropriate manoeuvres to relieve airway obstruction in children (airway manoeuvres, airway adjuncts, PEEP [positive end expiratory pressure]) | DOPS |
| PA_S_18 | 8 | S | Discusses appropriate sizing and application of oral and nasal pharyngeal airways, supraglottic airway devices and endotracheal tubes | CBD |
| PA_S_19 | 8 | К | Discusses indications for nasal intubation in children | MCAI |
| PA_S_20 | 8 | S | Performs oral intubation in children and infants Performs/has exposure to video laryngoscopy in a child/infant | DOPS |
| PA_S_21 SALUS | 1 | К | Selects appropriate ventilator settings for infants and children | DOPS |
| PA_S_22 | 5 | К | Formulates a pain management plan for paediatric anaesthesia after both major and minor surgery | CBD |
| PA_S_23 | 8 | S | Describes how to perform the following blocks in children: penile block ilioinguinal block caudal block | CBD |
| PA_S_24 | 8 | S | Anaesthetises children > 2 years with distant supervision | CBD |
| PA_S_25 | 8 | S | Anaesthetises children < 2 years with local supervisiON | CBD |
| PA_S_26 | 8 | S | Provides anaesthesia for minor/moderate elective procedures e.g. hernia repair, circumcision, hypospadiasis, squint repair, Grommets insertions | DOPS |
| PA_S_27 | 8 | S | Provides anaesthesia for minor/moderate emergency procedures e.g. appendicectomies, scrotal explorations, lacerations, bone fractures, incision and drainage of abscesses | DOPS |
| PA_S_28 | 8 | S | Performs anaesthesia for the shared airway e.g. dental treatment, tonsillectomy, cleft palate repair, microlaryngoscopy and bronchoscopy | Mini-CEX |
| PA_S_29 | 8 | S | Describes safe provision of anaesthesia for procedures in remote locations, e.g. CT, MRI, cardiac catheterisation | MCAI |
| PA_S_30 | 8 | S | Describes safe provision of anaesthesia for intra- and interhospital transfer of paediatric patient | MCAI |
| PA_S_31 | 4 | S | Works collaboratively with other members of the theatre team to prepare children for anaesthesia, deliver anaesthesia and recover children in a safe non-threatening environment | Mini-CEX |
| PA_S_32 SALUS | 7 | А | Explains what actions must be taken when non-accidental injury is suspected | MCAI |

| | Domain | KSA | Expected Standards | Assessment |
|-----------------------------|--------|-----|--|------------|
| | | | ANAESTHESIA AND ANALGESIA FOR PAEDIATRIC SURGERY CONTINUED | |
| PA_S_33 SALUS | 1 | А | Participates in clinical audit, critical incident reporting and paediatric anaesthesia morbidity and mortality meetings | DOPS |
| PA_S_34 | 7 | к | Reflects on and discusses the ethical aspects of paediatric anaesthesia and intensive care including: Managing a situation where the parent refuses care for their child Autonomy in the older child and adolescent including their ability to refuse treatment Management of the terminally ill child including decision to withdraw care | CBD |
| | | | MANAGEMENT OF THE CRITICALLY ILL CHILD | |
| PA_S_35 SALUS | 1 | К | Describes the clinical features helpful in recognising the critically ill child | FCAI |
| PA_S_36 | 8 | К | Discusses the assessment of blood loss in children | MCAI |
| PA_S_37 | 8 | К | Discusses the assessment and management of hypovolaemia | MCAI |
| PA_S_38 (S <u>ALUS</u>) | 1,8 | К | Discusses the diagnosis and resuscitative management of children with the following life-threatening conditions Cardiac arrest Respiratory arrest Circulatory shock Anaphylaxis Sepsis, including meningococcal sepsis Aspiration of gastric contents Severe bronchospasm Bronchiolitis Raised intracranial pressure Severe electrolyte and acid-basedisturbances Burn injury Status epilepticus Head injury | MCAI |
| PA_S_39 | 8 | S | Demonstrates intraosseous cannulation on simulation model | DOPS |

| Allocation | | | | | | | | |
|--|--------------------|---|--|--|--|--|--|--|
| 6 months in Model 4 Paediatric Hospital | | | | | | | | |
| Volume of Practice | Volume of Practice | | | | | | | |
| Including minimum of age < 2 years between 2 and 16 years These cases should include a minimum of: minor emergency cases minor elective cases shared airway procedures (tonsillectomy, dental extraction, removed of inhaled foreign body) Cases in remote area (e.g. CT, MRI) and/or paediatric transfer Total VOP Age < 16: | | | | | | | | |
| Workplace Based Assessments | | | | | | | | |
| Required Workplace based assessment | | 3 | | | | | | |
| Available WBAs CBD: DOPS: Mini-CEX: | | | | | | | | |
| Courses | | | | | | | | |
| Simulation | PAE, CDMP | | | | | | | |

Intensive Care Medicine

Description:

The Curriculum for Intensive Care Medicine is based on the CoBaTrICE model from the European Society of Intensive Care Medicine (ESICM), and has been adapted from the Joint Faculty of Intensive Care Medicine of Ireland's (JFICMI) current curriculum. This unit is intended to introduce the trainee in Anaesthesiology to the basic skills, knowledge and attitudes required in Intensive Care Medicine, such that they are able to provide appropriate care to a critically ill patient, and recognise the need for more specialised care. These skills can be further developed in sub-specialty training.

| | Domain | KSA | Expected Standards | Assessment |
|-----------------|--------|-----|---|------------|
| | | | RESUSCITATION AND INITIAL MANAGEMENT OF THE ACUTELY ILL PATIENT | |
| CC_S_1 SALUS | 1 | S | Recognises, assesses and stabilises the acutely ill patient with disordered physiology manages cardiopulmonary resuscitation manages the patient post-resuscitation | DOPS |
| CC_S_2 | 1 | S | Outlines principles of triage and discusses appropriate methods to prioritise patients for timely admission to ICU | CBD |
| CC_S_3 | 1 | К | Describes the management of mass casualties | CBD |
| CC_S_4 | 8 | S | Assesses and provides initial management of the trauma patient, including the patient with burns | Mini-CEX |
| | | | DIAGNOSIS – ASSESSMENT, INVESTIGATION, MONITORING AND DATA INTERPRETATION | |
| CC_S_5 | 8 | S | Obtains a history and performs an accurate clinical examination | DOPS |
| CC_S_6 | 8 | S | Discusses the interpretation of investigations electrocardiography haematological samples microbiological samples blood gas samples radiology | MCAI |
| CC_S_7 | 1 | S | Monitors and responds to trends in physiological variables | DOPS |
| CC_S_8 | 6 | S | Outlines how to integrate clinical findings with laboratory investigations to form a differential diagnosis | CBD |
| | | | DISEASE MANAGEMENT | |
| CC_S_9 SALUS | 1 | S | Manages the care of the critically ill patient with specific acute medical conditions | DOPS |
| CC_S_10 | 6 | К | Identifies the implications of co-morbidities in the acutely ill patient | MCAI |
| CC_S_11 | 8 | S | Describes the recognition and management of the patient with respiratory failure and/or ARDS (adult respiratory distress system) circulatory failure acute kidney failure acute liver failure neurological impairment gastrointestinal failure septic patient intoxication with drugs or environmental toxins | FCAI |

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|--|------------|
| | | | DISEASE MANAGEMENT CONTINUED | |
| CC_S_12 | 8 | S | Discusses the recognition and management of the patient with life- threatening maternal peripartum complications | MCAI |
| | | | THERAPEUTIC INTERVENTIONS/ORGAN SYSTEM SUPPORT IN SINGLE OR MULTIPLE ORGAN FAILURE | |
| CC_S_13 | 1 | S | Prescribes drugs and therapies safely | DOPS |
| CC_S_14 SALUS | 1 | S | Outlines the principles of antimicrobial therapy, including antimicrobial stewardship | MCAI |
| CC_S_15 | 1 | S | Describes procedure for the safe administration of blood and blood products | MCAI |
| CC_S_16 | 8 | S | Uses fluids and vasoactive drugs to support the circulation | DOPS |
| CC_S_17 | 6 | К | Describes the use of mechanical assist devices to support the circulation | MCAI |
| CC_S_18 | 8 | S | Initiates, manages and weans patients from invasive and non-invasive ventilatory support | Mini-CEX |
| CC_S_19 | 8 | S | Outlines the initiation, management and weaning of patients from renal replacement therapy | CBD |
| CC_S_20 | 8 | S | Outlines the recognition and management of electrolyte, glucose and acid-base disturbances | MCAI |
| CC_S_21 | 4 | S | Explains the role of nutritional assessment and support | MCAI |
| | | | SAFE USE OF PRACTICAL PROCEDURES | |
| CC_S_22 | 8 | S | Airway: administers oxygen using a variety of administration devices | DOPS |
| CC_S_23 | 8 | К | Describes difficult and failed airway management according to local protocols | CBD |
| CC_S_24 | 8 | S | Performs fibreoptic bronchoscopy and bronchoalveloar lavage (BAL) in the intubated patient Performs percutaneous tracheostomy Performs thoracocentesis via a chest drain | DOPS |
| CC_S_25 | 8 | S | Vascular Access: Performs arterial catheterisation Describes a method for surgical isolation of a vein/artery Performs ultrasound for vascular localisation Performs central venous catheterisation | DOPS |
| CC_S_26 | 8 | S | Circulatory System: Describes indications for defibrillation and cardioversion Describes cardiac pacing (transvenous, transthoracic or epicardial) Describes how to perform pericardioentesis Describes a method for measuring cardiac output and for deriving haemodynamic variables | FCAI |
| CC_S_27 | 8 | S | Neurological System: Performs lumbar puncture | DOPS |
| CC_S_28 | 8 | S | Gastrointestinal System Outlines indications for abdominal paracentesis Describes placement and management of Sengstaken - Blakemore tube (or equivalent) Describes indications for, and safe conduct of gastroscopy | CBD |

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|---|------------|
| | | | PERI-OPERATIVE CARE | |
| CC_S_29 | 8 | S | Manages the pre- and post-operative care of the high risk surgical patient Manages the care of the patient following cardiac surgery craniotomy organ transplantation trauma patient | Mini-CEX |
| | | | SUPPORTIVE CARE | |
| CC_S_30 | 2 | S | Outlines options to minimise the physical and psychosocial consequences of critical illness for patients and families | MCAI |
| CC_S_31 | 8 | S | Manages the assessment, prevention and treatment of pain and delirium | DOPS |
| CC_S_32 | 8 | S | Manages sedation and neuromuscular blockade | DOPS |
| CC_S_33 | 1 | S | Co-ordinates the safe and timely discharge of patient from the ICU | Mini-CEX |
| | | | END OF LIFE CARE | |
| CC_S_34 | 3,4,8 | А | Manages the process of withholding or withdrawing life sustaining treatment with the multidisciplinary team | Mini-CEX |
| CC_S_35 | 3 | А | Discusses the implications of end of life care for patients with their families and guardians | CBD |
| CC_S_36 | 8 | S | Manages palliative care of the critically ill patient | Mini-CEX |
| CC_S_37 | 8 | S | Describes brainstem death testing | FCAI |
| CC_S_38 | 8 | S | Manages the physiological support of the organ donor | DOPS |
| | | | PAEDIATRIC CARE | |
| CC_S_39 | 8 | S | Describes the recognition of the acutely ill child and the initial management of paediatric emergencies including transfer of the critically ill child | FCAI |
| CC_S_40 SALUS | 1 | К | Describes national legislation and guidelines relating to child protection and their relevance to critical care | FCAI |
| | | | TRANSPORT | |
| CC_S_41 | 1 | S | Undertakes transport of the mechanically ventilated critically ill patient outside the ICU | DOPS |
| | | | PATIENT SAFETY AND HEALTH SYSTEMS MANAGEMENT | |
| CC_S_42 | 4 | S | Leads a daily multidisciplinary ward round | Mini-CEX |
| CC_S_43 | 1 | А | Describes local infection control measures | CBD |
| CC_S_44 | 1 | А | Identifies environmental hazards and outlines opportunities to promote safety for patients and staff | MCAI |
| CC_S_45 SALUS | 1 | К | Describes methods to minimise risk of critical incidents and adverse events, including complications of critical illness | MCAI |

| | Domain | KSA | Expected Standards | Assessment |
|------------------|--------|-----|--|------------|
| | | | PATIENT SAFETY AND HEALTH SYSTEMS MANAGEMENT CONTINUED | |
| CC_S_46 | 4 | S | Participates in a multi-disciplinary case conference | Mini-CEX |
| CC_S_47 SALUS | 1 | K | Critically appraises and applies guidelines, protocols and care bundles | FCAI |
| CC_S_48 | 6 | К | Describes commonly used scoring systems for assessment of severity of illness, case mix and workload | MCAI |
| CC_S_49 | 5 | К | Discusses the managerial and administrative responsibilities of the ICM specialist | CBD |
| | | | PROFESSIONALISM | |
| CC_S_50 | 3 | А | Communicates effectively with patients and relatives | DOPS |
| CC_S_51 | 4 | А | Communicates effectively with members of the health care team | DOPS |
| CC_S_52 SALUS | 1 | S | Maintains accurate and legible records/documentation including notes in electronic charts | DOPS |
| CC_S_53 | 3 | А | Involves patients (or their next of kin if applicable) in decisions about care and treatment | DOPS |
| CC_S_54 | 2 | А | Demonstrates respect of cultural and religious beliefs and an awareness of their impact on decision-making | DOPS |
| CC_S_55 | 2 | А | Discusses the privacy, dignity, confidentiality and legal constraints on the use of patient data | MCAI |
| CC_S_56 | 4 | А | Collaborates and consults; promotes team-working | Mini-CEX |
| CC_S_57 | 1 | S | Ensures continuity of care through effective hand-over of clinical information | Mini-CEX |
| CC_S_58 SALUS | 1 | А | Supports clinical staff outside the ICU to enable the delivery of effective care | Mini-CEX |
| CC_S_59 | 4 | К | Appropriately supervises and delegates to others, the delivery of patient care | Mini-CEX |
| CC_S_60 | 1 | S | Takes responsibility for safe patient care | Mini-CEX |
| CC_S_61 | 2 | А | Formulates clinical decisions with respect for ethical and legal principles | Mini-CEX |
| CC_S_62 | 6, 7 | К | Seeks learning opportunities and integrates new knowledge into clinical practice | Mini-CEX |
| CC_S_63 | 4, 6 | К | Participates in multidisciplinary teaching | DOPS |
| CC_S_64 | 6 | К | Participates in research or audit | Mini-CEX |

| Allocation | Allocation | | | | | | |
|---|--|---|--|--|--|--|--|
| 3x2 months rotation in Intensive Care Medicine At least 2x2 months rotation in a JFICMI accredited ICU | | | | | | | |
| Volume of Practice | | | | | | | |
| Completion of logbook showing breadth of patient case managementInvolvement in multi-disciplinary ward roundsAttend Departmental training and education meetingsPrepare and deliver a lecture as part of the Educational ProgrammeReview and present at journal club meetings | | | | | | | |
| Workplace Based Assessments | | | | | | | |
| Required Workplace based assessment | | 5 | | | | | |
| Available WBAs CBD: DOPS: Mini-CEX: | | | | | | | |
| Courses | | | | | | | |
| Simulation SICC; | | | | | | | |
| Course | BASIC; Beyond BASIC; Renal BASIC; Echo Courses | | | | | | |

Pain Medicine

Description:

By the completion of the Pain Medicine unit, the trainee will be able to manage patients with acute pain and be able to participate as a multidisciplinary team member in the management of patients with chronic pain. Some simple procedures may be performed under supervision.

| | Domain | KSA | Pain Medicine | Assessment |
|---------|--------|-----|--|------------|
| PM_S_1 | 6 | К | Describes the anatomy of the pain pathways | MCAI |
| PM_S_2 | 6 | К | Outlines definition of acute and chronic pain Describes the association between acute and chronic pain and the risk of progression from acute to chronic pain | MCAI |
| PM_S_3 | 6 | К | Describes the methods of assessment of acute pain including scales, including in the following patient groups: Children Elderly Cognitively impaired Critically ill patient | MCAI |
| PM_S_4 | 3,6 | S | Formulates a management plan for acute pain, acute pain in chronic pain patients and consultations on the ward | Mini-CEX |
| PM_S_5 | 2,3,8 | S | Participates in acute pain management ward round and learns to conduct a multidisciplinary round | Mini-CEX |
| PM_S_6 | 6 | К | Lists the predictive factors for chronic postsurgical pain and outlines measures to prevent or minimise its occurrence | MCAI |
| PM_S_7 | 6 | К | Describes the common types of chronic pain including: nociceptive, neuropathic and visceral pain | MCAI |
| PM_S_8 | 2,3,8 | S | Takes history and performs focused physical examination of the patient with chronic pain and formulates a diagnostic and therapeutic plan | DOPS |
| PM_S_9 | 6 | К | Discusses the pharmacology of drugs used in pain management including: Paracetamol NSAIDs Opioids Tramadol Local anaesthetics NMDA (N-methyl-D-aspartate) antagonists Anticonvulsants Antidepressants Corticosteroids | MCAI |
| PM_S_10 | 6 | К | Describes the pharmacology of opioids, including: Mechanisms of action Routes of administration and its clinical implications Dose conversion between commonly used opioids Adverse effects Potential adverse drug interactions Opioid tolerance and dependence Appropriate prescribing | MCAI |
| PM_S_11 | 6 | К | Describes potential personal and societal issues around long term opioid prescriptions in chronic pain | CBD |
| PM_S_12 | 2,6 | К | Outlines management strategies for opioid tolerant patients with acute pain | CBD |

| | Domain | KSA | Pain Medicine | Assessment |
|---------|--------|-----|--|------------|
| | | | Describes the assessment and management of a selection of the following pain conditions: Low back pain Cancer pain Phantom limb pain | |
| PM_S_13 | 6 | К | Headache Dental and facial pain Paediatric chronic pain Neuropathic pain syndromes Visceral pain Fibromyalgia Spinal cord injury pain Central post-stroke pain syndrome Burn pain Pain in pregnancy Pelvic pain | FCAI |
| PM_S_14 | 6,8 | К | Describes and performs a selection of the following interventional pain management techniques, including indications, complications, procedure: Trigger Point Injections Caudal or lumbar epidural Steroid Injection under visualisation (ultrasound or fluoroscopy) Sympathetic Blocks (observed only) Diagnostic Blocks Lumbar Facet Joint – medial branch blocks Selective Lumbar Nerve Root Blocks Radio Frequency (RF) & Pulsed Rhizotomy (observed only) Spinal Cord Stimulation (observed only) | DOPS |
| PM_S_15 | 3 | А | Communicates effectively with the chronic pain patient | DOPS |
| PM_S_16 | 4 | А | Works collaboratively with other members of the multi-disciplinary Pain Service as an effective team | Mini-CEX |
| PM_S_17 | 4,5 | А | Describes the indication for, and structure of, a pain management programme | FCAI |
| PM_S_18 | 2,4 | К | Participates in a Pain Management programme, or equivalent multi- disciplinary Care Programme | CBD |

| Allocation | | | | | | |
|--|-------|----------|--|--|--|--|
| 2 month rotation Pain Medicine | | | | | | |
| Volume of Practice | | | | | | |
| Consultations | | 46 | | | | |
| Acute Pain Round Clinic - New | | 6 | | | | |
| Clinic – Review | | 10 10 | | | | |
| Ward - New | | 5 | | | | |
| Ward – Review | | 15 | | | | |
| waiu - Keview | | | | | | |
| Procedures | | | | | | |
| Epidural under x-ray | | 3 | | | | |
| Epidural under ultrasound | | 2 | | | | |
| Facet joint injection under x-ray | | 5 | | | | |
| Workplace Based Assessments | | | | | | |
| Required Workplace based assessment | | 2 | | | | |
| | CBD: | 3 | | | | |
| Available WBAs | DOPS: | 3 | | | | |
| Mini-CEX: | | | | | | |
| Courses | | | | | | |
| Attend one Faculty or IPS meeting and / or one prepared and delivered lecture (30 minutes) as part of Educational programme Additional/ optional at this level - Radiation protection course | | | | | | |



Appendices



1.1 Patient Safety and Quality of Patient Care

Please see the WHO Patient Safety Curriculum.

Clinical commitment to Patient Safety and Quality of Patient Care

The sections below are extracts from Part B: Clinical Components in the preceding text that refer explicitly to aspects of Patient Safety and Quality of Patient Care.

Peri-operative Management

| PA_C_13 S <mark>ALUS</mark> | 1 | S | Reviews patient clinical case notes and associated records | CBD |
|------------------------------------|-------|-------|--|----------|
| PA_C_20 (S <mark>AILUS</mark>) | 1,2,5 | K,S,A | The candidate will demonstrate the ability: to establish a problem list to judge whether the patient is fit for and optimally prepared for the proposed intervention to manage co-existing medicines in the perioperative period to plan anaesthesia and postoperative care for common surgical procedures to recognise their limitations and reliably determine the level of supervision they will need to explain options and risks of routine anaesthesia to patients, in a way they understand, and obtain their consent for anaesthesia | Mini-CEX |
| PA_C_21 | 1,6 | К | Identifies the principles of consent for surgery and anaesthesia, including the issue of competence | MCAI |
| PA_C_22 <mark>SALUS</mark> | 1,2 | K,S | Outlines the particular importance of considering the patient's level of understanding and mental state [and also that of the parents, relatives or carers when appropriate] and how this may impair their capacity for consent | MCAI |

Airway Management

| AM_C_6 | 1 | К | Discusses factors that contribute to risk of regurgitation and pulmonary aspiration | MCAI |
|--------------------------------|---|---|---|------|
| AM_C_11 SALUS | 1 | К | Describes the principles of airway management for patients with tracheostomy | CBD |
| AM_C_19 SALUS | 1 | К | Can list the indications and contraindications for the use of supraglottic airway devices | MCAI |
| AM_C_23 | 1 | К | Discusses the risks associated with tracheal intubation (dental risks, risks associated with positive pressure ventilation, inadvertent oesophageal/endobronchial intubation) | MCAI |
| AM_C_33 S <mark>ALUS</mark> | 1 | К | Discusses the Difficult Airways Society ('DAS') +/- other recognised difficult airway guidelines | CBD |
| AM_C_39 SALUS | 1 | К | Discusses the differential diagnoses and management of desaturation during and after general anaesthesia | CBD |
| AM_C_40 | 1 | К | Describes the causes and management of stridor | MCAI |

| GA_C_6 SALUS | 1 | S | Properly prepares the anaesthetic room and/or operating theatre | IAC |
|----------------------------------|---|---|--|------|
| GA_C_7 SALUS | 1 | S | Conducts a pre-operative equipment check, as per AA (Association of Anaesthetists) guidelines | IAC |
| GA_C_8 SALUS | 1 | S | Prepares the required drugs, including emergency drugs | IAC |
| GA_C_10 | 1 | К | Outlines preoperative fasting guidelines, identifies patients at risk of pulmonary aspiration of gastric contents and discusses perioperative measures to reduce the risk of same | MCAI |
| GA_C_16 SALUS | 1 | S | Ensures that standard mandatory monitoring is applied | IAC |
| GA_C_17 SALUS | 1 | К | Participates in and/or initiates the Surgical Safety Checklist according to local protocol | IAC |
| GA_C_27 | 1 | К | Ensures safe patient positioning for surgery | DOPS |
| GA_C_29 SALUS | 1 | К | Maintains anaesthesia and monitors patient satisfactorily | DOPS |
| GA_C_31 SALUS | 1 | S | Outlines the recognition of emergencies and knows when to call for help/ support | CBD |
| GA_C_36 <mark>(S</mark> ALUS) | 1 | S | Outlines the management of common problems in the PACU including: Hypotension Hypertension Tachycardia Bradycardia Postoperative nausea and vomiting Severe pain | FCAI |
| GA_C_37 | 1 | К | Explains the criteria for patient discharge from PACU | MCAI |

General Anaesthesia for ASA I-II Patients for Low-risk Surgical Procedure

Regional Anaesthesia (1) – Neuraxial and Foundation Peripheral Nerve Blockade

| RN_C_12 (<i>SATUS</i>) | 1,8 | S | Demonstrates safety during the blockade, including: Confirming site of surgery has been marked, and confirming site of regional technique Attaches appropriate monitoring Establishes intravenous access Positioning of patient Identification of anatomical landmarks Use of aseptic technique Selection of appropriate needle Selecting, checking, drawing up, diluting, and labelling of drugs for injection Checking for inadvertent intravenous and intraneural administration | Mini-CEX |
|-----------------------------|-----|---|--|----------|
| RN_C_26 | 1 | К | Knows the criteria for safe discharge of a patient under regional blockade | CBD |
| RN_C_27 | 1 | А | Explains the need to review patients following regional technique to ensure block has worn off and there are no residual complications | MCAI |

| AA_C_1 SALUS | 1,5 | К | Describes the requirements of a facility to meet the requirements for ambulatory surgery | FCAI |
|-------------------------------|------|---|---|------|
| AA_C_3 SALUS | 1,7 | К | Displays knowledge of local and national guidelines for the provision of ambulatory surgical services | FCAI |
| | | | Outlines requirements for the patients to ensure their suitability for day | |
| AA_C_5 SALUS | 1,2 | A | case procedures, with regard to Complexity of surgery Co-morbidities Social support | CBD |
| AA_C_6 <mark>(SALUS</mark> | 1,5 | К | Describes the protocols for selection of day surgery Medical Surgical Social | CBD |
| AA_C_9 SALUS | 1, 4 | К | Describes the principles of pre-operative assessment of patients presenting for ambulatory surgery Understands and describes the role of nurse-led assessment | MCAI |
| AA_C_10 | 1,5 | К | Explains the role of appropriate pre-operative investigations for day surgery | MCAI |
| AA_C_14 SALUS | 1,8 | S | Discusses appropriate choice of analgesia for ambulatory surgery including NSAIDs ('non-steroidal anti-inflammatory drugs') Local/Regional Opiates | MCAI |
| AA_C_15 SALUS | 1,8 | К | Discusses anaesthetic management of the paediatric patient for day case surgery | CBD |
| AA_C_17 SALUS | 1,5 | К | Explains the potential causes of unanticipated in-patient admission following day surgery | MCAI |

Anaesthesia for Ambulatory Surgery

Anaesthesia for Orthopaedic Surgery

| OR_C_2 | 1 | к | Discusses the assessment and anaesthetic management of the elderly patient with a hipfracture | MCAI |
|------------------|---|---|--|------|
| OR_C_6 | 1 | к | Discusses the advantages and disadvantages of regional anaesthesia and analgesia for orthopaedic surgery | MCAI |
| OR_C_7 SALUS | 1 | К | Discusses the use of thromboprophylaxis for orthopaedic patients especially joint replacement | FCAI |
| OR_C_8 SALUS | 1 | к | Discusses the perioperative management of patients on therapeutic anticoagulation requiring anaesthesia for orthopaedic procedures, including indications for bridging anticoagulation peri-operatively | CBD |
| OR_C_9 | 1 | к | Discusses the choice and timing of antibiotic prophylaxis for orthopaedic patients | MCAI |
| OR_C_12 | 1 | к | Discusses the safe use of limb tourniquets for orthopaedic procedures | MCAI |
| OR_C_16 SALUS | 1 | к | Discusses the diagnosis and management of possible complications of orthopaedic surgery including: Bone cement implantation syndrome Fat embolism syndrome Pulmonary embolism Compartment syndrome Major blood loss Anaphylaxis Local anaesthetic toxicity, symptoms and management Neurological injury Tourniquet-induced ischaemia-reperfusion injury Chronic and persistent pain | FCAI |
| OR_C_17 SALUS | 1 | к | Describes the principles of perioperative anaesthetic management of the patient for pelvic bone and joint surgery | FCAI |

Trauma Management

| TR_C_3 | 1 | К | Outlines infection control techniques in the trauma environment | CBD |
|------------------|-----|-----|--|------|
| TR_C_16 | 1 | к | Describes rationale and methods for immobilisation of Pelvic fractures Long bone fractures | FCAI |
| TR_C_17 | 1 | K,S | Discusses the effects of hypothermia and methods to prevent hypothermia | MCAI |
| TR_C_29 | 1 | К | Discusses indications and contra-indications for regional and peripheral nerve blocks in the patient with multiple injuries | FCAI |
| TR_C_31 | 1,4 | К | Discusses principles of clinical management for the stabilisation and transfer of the patients with multiple injuries | FCAI |
| TR_C_36 SALUS | 1,2 | А | Outlines the patient's right to privacy, dignity and right to self- determination, including the rights to refuse treatment | CBD |

Transfer of the Critically Unwell Patient

| TF_C_1 | 1,5 | К | Discusses hospital protocols governing transfers between departments Outlines regional protocols for organising transfer between departments | CBD |
|------------------|-------|---|---|----------|
| TF_C_5 SALUS | 1,6 | А | Outlines the ethical issues related to patient transfer | FCAI |
| TF_C_7 SALUS | 1,6 | К | Describes minimum monitoring required for safe transfer | MCAI |
| TF_C_8 SALUS | 1,6 | К | Describes basic equipment, including back-up equipment required for transfer | MCAI |
| TF_C_10 SALUS | 1,2,3 | А | Discusses the need for transfer with the patient and their family | CBD |
| TF_C_27 | 1 | А | Describes the importance of record keeping during transfer | MCAI |
| TF_C_28 SALUS | 1,4,5 | А | Outlines the importance of maintaining communication, when appropriate, with the patient and members of the transfer team | MCAI |
| TF_C_36 SALUS | 1,8 | S | Demonstrates the ability to maintain monitoring of the patient during transfer | Mini-CEX |

Anaesthesia for General, Urological and Gynaecological Surgery

| GA_M_7 SALUS | 1 | К | Outlines the principles of enhanced recovery care pathways | MCAI |
|-------------------------|---|---|--|------|
| | | | Discusses the diagnosis and management of the possible complications of surgical procedures including: Venous air embolism Major baemorrhage | |
| GA_M_10 <i>SALUS</i> | 1 | К | Major haemorrhage Aspiration Pneumoperitoneum Sepsis Reperfusion of ischaemic organs Acid-base imbalance Temperature control Positioning injuries | MCAI |

Anaesthesia for Plastic and Reconstructive Surgery, including Burns

| PB_M_4 (<mark>SALUS</mark>) | 1 K | Discusses pain management for patients undergoing plastic and reconstructive surgery | FCAI |
|----------------------------------|-----|--|------|
|----------------------------------|-----|--|------|

Anaesthesia Outside of the Operating Theatre, including conscious sedation

| | | | Discusses the indications for providing sedation and/or anaesthesia outside of the operating theatre, for example: (list of locations/various procedures) In the Magnetic Resonance Imaging ('MRI')/CT scanner For ultra-sound guided percutaneous procedures For diagnostic and therapeutic radiologic procedures in the | |
|------------------------------------|---|---|--|------|
| AO_M_1 SALUS | 6 | К | Interventional Radiology Department (cardiac catheterisation) For gastrointestinal endoscopic procedures (ERCP) For procedures in the Emergency Department (e.g. closed reduction of fracture, closed reduction of dislocation of joint) For procedures in the ICU For cardioversion in coronary care units For electroconvulsive therapy in psychiatric units For in vitro fertilization | FCAI |
| ao_m_2 (<mark>\$41,0</mark> \$ | 1 | К | Discusses the challenges in providing safe sedation/anaesthesia at a remote location including Limited space, lighting and patient access Monitors and equipment which may be old or unfamiliar Lack of piped medical gas supply and scavenging Lack of trained anaesthetic assistance and lack of immediate back-up Environmental hazards, such as ionising radiation, magnetic field, noise The need to plan for adequate equipment, supplies and drugs for unanticipated scenarios The need for collaboration and effective communication with procedural staff | CBD |
| AO_M_5 SALUS | 1 | К | Explains the general safety precautions and equipment requirements in specific environments, e.g. MRI suites | FCAI |
| AO_M_7 SALUS | 1 | К | Explains the implications of exposing the pregnant or potentially pregnant patient or staff member to ionising radiation | MCAI |
| AO_M_10 SALUS | 1 | К | Discusses the special considerations for emergency cardioversion | FCAI |

| RP_M_1 SALUS | 1,2 | A | Obtains consent Accepts the right of the patient to decline regional anaesthesia, even when there are clinical advantages | DOPS |
|-------------------------------|-----|---|--|----------|
| RP_M_3 SALUS | 1,8 | А | Demonstrates safety for the procedure Ensures the site of surgery is marked | DOPS |
| RP_M_4 <mark> SALUS</mark> | 1,8 | К | Discusses advantages and disadvantages of peripheral regional anaesthesia | FCAI |
| RP_M_13 <u>SALUS</u> | 1,7 | S | Demonstrates safety during the blockade, including: Confirming the markings for site of surgery Attaching appropriate monitoring Establishing IV ('intra-venous') access prior to procedure Positioning of the patient Identifying the anatomical landmarks Using aseptic technique Selecting appropriate needle Selecting, checking, drawing up, diluting and labelling of drugs for injection Checking for inadvertent intravenous and intraneural administration with ultrasound | Mini-CEX |
| RP_M_19 SALUS | 1,5 | S | Documents the procedure and any complications | DOPS |
| RP_M_22 SALUS | 1,8 | К | Discusses the investigations and management of patients who have developed complications as a result of regional anaesthesia, including nerve injury | MCAI |
| RP_M_24 SALUS | 1,5 | К | Knows the criteria for safe discharge of a patient under regional blockade | CBD |
| RP_M_25 SALUS | 1,7 | А | Understands the need to review patients following regional technique to ensure patient is aware of safety measures until the block has worn off | CBD |

Regional Anaesthesia 2 - Peripheral Nerve Blockade

Anaesthesia for Ophthalmic Surgery

| OP_M_1 SALUS | 1,8 | S | Discusses the peri-operative assessment of the ophthalmic patient Discusses associated co-morbidities Outlines opportunities to optimise high risk patients | FCAI |
|------------------|-----|---|---|------|
| OP_M_3 SALUS | 1,2 | К | Discusses the special requirements for children undergoing ophthalmic procedures | CBD |
| OP_M_9 SALUS | 1 | А | Applies the safe site surgery checklist to prevent wrong site surgery | DOPS |
| OP_M_10 SALUS | 1,6 | S | Discusses precautions for revision surgery in patients who have had intra-ocular gas | FCAI |
| OP_M_18 SALUS | 1 | К | Describes the risks associated with needle block | FCAI |
| OP_M_20 SALUS | 1 | К | Describes precautions and safety procedures for laser therapy during ophthalmic surgery | FCAI |
| OP_M_22 SALUS | 1 | А | Understands and describes the need to review patients following regional technique to ensure block has worn off and there are no residual complications | CBD |

Anaesthesia for Otolaryngology, Oral and Maxillofacial, Head and Neck Surgery

| EN_M_10 SALUS | 1 | I K | Discusses the precautions, possible complications and anaesthetic implications of laser surgery of the airway | CBD |
|------------------|---|-----|---|-----|
|------------------|---|-----|---|-----|

Anaesthesia for VascularSurgery

| VA_M_14 SALUS | 1,5 | К | Discusses the advantages and disadvantages of interventional radiological procedures vs open procedures | FCAI |
|---|-------|-----|---|------|
| va_m_15 (<mark><i>salus</i>)</mark> | 1,5,6 | К | Specific Procedures Carotid endarterectomy Explains the benefits and risks of general vs regional anaesthesia Carotid clamping and unclamping Management of cerebral ischaemia Outlines recovery room complications and management | FCAI |
| VA_M_17 (<mark>SALUS</mark> | 1,6 | K,S | Describes the management of patients for endovascular radiological procedures Discusses reaction to IV contrast, high radiation dose | FCAI |

Anaesthesia for Neurosurgery and Neuroradiology

| NR_M_3 SALUS | 1 | К | Discusses the principles and strategies of cerebral protection | FCAI |
|------------------|---|---|--|------|
| NR_M_11 SALUS | 1 | К | Discusses the pathophysiology and management of secondary brain injury | FCAI |
| NR_M_18 SALUS | 1 | К | Discusses the implications for anaesthesia and the risks associated with the positions used for neurosurgery | CBD |
| NR_M_30 SALUS | 1 | К | Understands and describes the challenges of providing anaesthesia for interventional neuroradiology procedures | FCAI |

Anaesthesia for Cardiac and Thoracic Surgery

| CT_M_3 SALUS | 1,8 | К | Explains the significance of pre-operative functional investigations of respiratory and cardiac performance | FCAI |
|-----------------|-----|---|---|------|
| CT_M_9 SALUS | 1,8 | S | Outlines the risk of the operation in the patient who has cardiac or respiratory disease using common scoring systems | FCAI |
| CT_M_24 | 1,8 | К | Describes indications and contra-indications and management of one lung ventilation | FCAI |

| OB_S_12 SALUS | 1,6 | К | Describes clinical methods to assess for foetal health in utero | MCAI |
|--------------------|-------|---|--|------|
| OB_S_15 SALUS | 1,6 | К | Outlines potential effects on the foetus of drugs administered during pregnancy | MCAI |
| OB_S_16 SALUS | 1,6 | К | Outlines the effects on the neonate of drugs administered in association with breast feeding | MCAI |
| OB_S_17 SALUS | 1,6 | К | Identifies risk factors and required pre-operative interventions to optimise clinical condition | CBD |
| OB_S_22 SALUS | 1,2,8 | S | Outlines the principles of regional analgesia for labour Describes management of complications of regional analgesia, including: spinal tap, hypotension, hypertension, total spinal | CBD |
| OB_S_29 SALUS | 1,6 | К | Describes how anaesthetic techniques must be modified to the pregnant patient | MCAI |
| OB_S_32 SALUS | 1,6 | К | Explains thromboprophylaxis requirements in pregnancy, with reference to local guidelines | MCAI |
| OB_S_33 SALUS | 1,8 | S | Safely positions the pregnant patient to minimise injury and complications | DOPS |
| OB_S_45 SALUS | 1 | К | Discusses basic and advanced life support in the pregnant patient | MCAI |
| OB_S_46 (SALUS) | 1,8 | к | Discusses resuscitation of the pregnant patient Positioning patient to avoid aorto-caval compression Altered maternal physiological responses Maternal resuscitation as the first priority Peri-mortem caesarean section | MCAI |
| OB_S_50 SALUS | 1,6 | К | Discusses common causes of maternal morbidity and mortality | FCAI |
| OB_S_51 SALUS | 1,6 | К | Demonstrates knowledge of national reports | FCAI |

Anaesthesia and Analgesia for Obstetric Care

| PA_S_4 SALUS | 1 | К | Discusses the assessment and management of a child with upper respiratory chest infection or concurrent medical illness in the preoperative period | FCAI |
|--------------------------|-----|---|---|------|
| PA_S_6 SALUS | 1 | К | Discusses the clinical features, possible causes and management of upper airway obstruction including laryngospasm | FCAI |
| PA_S_7 | 1 | К | Discusses the clinical features of the child with critical airway obstruction and outlines a managementplan | CBD |
| PA_S_8 SALUS | 1 | К | Discusses the clinical features associated with the difficult paediatric airway | MCAI |
| PA_S_21 SALUS | 1 | к | Selects appropriate ventilator settings for infants and children | DOPS |
| PA_S_32 SALUS | 7 | А | Explains what actions must be taken when non-accidental injury is suspected | MCAI |
| PA_S_33 | 1 | А | Participates in clinical audit, critical incident reporting and paediatric anaesthesia morbidity and mortality meetings | DOPS |
| PA_S_35 | 1 | К | Describes the clinical features helpful in recognising the critically ill child | FCAI |
| PA_S_38 S <u>ATUS</u> | 1,8 | к | Discusses the diagnosis and resuscitative management of children with the following life-threatening conditions Cardiac arrest Respiratory arrest Circulatory shock Anaphylaxis Sepsis, including meningococcal sepsis Aspiration of gastric contents Severe bronchospasm Bronchiolitis Raised intracranial pressure Severe electrolyte and acid-base disturbances Burn injury Status epilepticus Head injury | MCAI |

Intensive Care Medicine

| CC_S_1 (SALUS) | 1 | S | Recognises, assesses and stabilises the acutely ill patient with disordered physiology manages cardiopulmonary resuscitation manages the patient post-resuscitation | DOPS |
|-------------------|---|---|--|----------|
| CC_S_2 | 1 | S | Outlines principles of triage and discusses appropriate methods to prioritise patients for timely admission to ICU | CBD |
| CC_S_3 | 1 | К | Describes the management of mass casualties | CBD |
| CC_S_7 | 1 | S | Monitors and responds to trends in physiological variables | DOPS |
| CC_S_9 SALUS | 1 | S | Manages the care of the critically ill patient with specific acute medical conditions | DOPS |
| CC_S_13 SALUS | 1 | S | Prescribes drugs and therapies safely | DOPS |
| CC_S_14 | 1 | S | Outlines the principles of antimicrobial therapy, including antimicrobial stewardship | MCAI |
| CC_S_33 SALUS | 1 | S | Co-ordinates the safe and timely discharge of patient from the ICU | Mini-CEX |
| CC_S_40 SALUS | 1 | К | Describes national legislation and guidelines relating to child protection and their relevance to critical care | FCAI |
| CC_S_41 SALUS | 1 | S | Undertakes transport of the mechanically ventilated critically ill patient outside the ICU | DOPS |
| CC_S_43 SALUS | 1 | А | Describes local infection control measures | CBD |
| CC_S_44 SALUS | 1 | А | Identifies environmental hazards and outlines opportunities to promote safety for patients and staff | MCAI |
| CC_S_45 SALUS | 1 | К | Describes methods to minimise risk of critical incidents and adverse events, including complications of critical illness | MCAI |
| CC_S_47 | 1 | К | Critically appraises and applies guidelines, protocols and care bundles | FCAI |
| CC_S_52 | 1 | S | Maintains accurate and legible records/documentation including notes in electronic charts | DOPS |
| CC_S_57 | 1 | S | Ensures continuity of care through effective hand-over of clinical information | Mini-CEX |
| CC_S_58 SALUS | 1 | А | Supports clinical staff outside the ICU to enable the delivery of effective care | Mini-CEX |
| CC_S_60 SALUS | 1 | S | Takes responsibility for safe patient care | Mini-CEX |

Pain Medicine

| PM_S_11 SALUS | 6 | К | Describes potential personal and societal issues around long term opioid prescriptions in chronic pain | CBD |
|------------------|---|---|--|-----|
|------------------|---|---|--|-----|

1.2 Self-Management

The College of Anaesthesiologists of Ireland is committed to supporting trainees' wellbeing. The College advises trainees to monitor their physical and emotional wellbeing and to seek assistance at an early stage if they have any concerns about their health or feel they are experiencing significant stress. It is important for trainees to adhere to the medical advice and management plans of their doctors. Trainees should prioritise their own health and wellbeing so that they can in turn support the patients in their care.

The Importance of General Practitioner ('GP') Support:

It is recommended that trainees register with a General Practitioner ('GP') who is neither a friend nor a family member and who will ensure that professional boundaries are maintained in all decision making. Although doctors will have their own thoughts on diagnosis and appropriate interventions, trainees should bring an open mind to the consultation and just 'be a patient'. Most GPs are very comfortable with treating doctors as patients and are registered on the Irish College of General Practitioners' website.

College Supports:

| For designated tutor within each Training Site, contact: | Training@coa.ie |
|--|----------------------------|
| Directors of Training: | Directorsoftraining@coa.ie |
| Training Department: | Training@coa.ie |
| Exams Department: | Exams@coa.ie |
| Committee of Anaesthesiology Trainees: | CAT@coa.ie |
| Lead Anaesthesiology Trainee Coordinator: | LAT@coa.ie |

HSE Supports:

| General Practitioner | List available on Irish College of General Practitioners' website |
|--|---|
| HSE Employee Assistance Programme | https://www.hse.ie |
| HSE Workplace Health and Wellbeing Unit: Contact: Dr Lynda Sisson | HR.wellbeing@hse.ie_ |
| Pieta House | https://www.pieta.ie/ call 1800 247 247 |
| Practitioner Health | https://practitionerhealth.ie/ call 01 297 0356 |
| Samaritans | https://www.samaritans.org/?nation=ireland call 01 116 123 |
| Your Mental Health | www.yourmentalhealth.ie |

1.3 Training Diary

The Medical Council's Professional Competence Schemes ('PCS') are formal structures to ensure that all doctors registered and working in Ireland maintain their education, knowledge and skills (competence) at an acceptable level. All registered medical professionals have a legal duty to maintain professional competence, however, trainees registered on the Trainee Specialist Division of the Medical Council Register are NOT required to be enrolled on a PCS. This is because trainees on a formal training programme are recognised as undergoing consistent work in education and skills.

However, although trainees on the College's specialist training programme are not required to be enrolled on a PCS, the CAI utilises the concept of Professional Competence to promote self-directed and practice-based learning activities, as well as activities that maintain and develop professionalism, knowledge, skills and attitudes in their trainees. The eight domains of good professional practice recommended by the Medical Council and referred to in Section One of this document describe a framework of competencies applicable to all doctors and the training diary, which is located in the trainee's e-Portfolio, maps learning activities to each of these domains. These domains should be used by trainees to assess professional development needs.

With this structure in mind, trainees are required to complete a Training Diary which reflects all elements of learning. Mandatory documentation of attendance at learning activities is required which mirror those outlined in the PCS.

The points accrued in the training diary are a reflection of the Medical Council's Eight Domains of Good Professional Practice. Specialist anaesthesiologist trainees are expected to demonstrate professionalism, this will be documented in the Training Diary, and reviewed by the Training Department at the trainee's Annual Progression Review.

Expected annual requirements include:

50 Continuing Professional Development ('CPD') credits annually comprising (minimum):

- External 20 credits
- Internal 20 credits
- Personal Learning 5 credits
- Research, Postgraduate Examining and Teaching 2 credits desirable
- Quality improvement project, which can include clinical or practice related audit.

Training Diary Activity Categories

External:

Attending Consultant Session Outside Base Hospital; CAI Meetings; International Meetings; National Meetings; Training Courses; Live video conference teaching with participant interaction

Internal:

Mortality & Morbidity Meetings; Journal Clubs; Grand Rounds; Appraisal Training; Hospital Lectures; Attending Consultant Session in Base Hospital

Personal:

Recorded Internet Lectures; Independent Study; Verified Distance Learning; Verified Computer Assisted Learning; Verified Educational Video; Verified MCQ's in Medical Journey

Research or Teaching:

Research Meetings; Presentation of Research Findings; Publication in Recognised Medical Journal (5 credits per publication); Publication of Chapter or Book (5 credits per publication); College or University Examinations; Faculty on CAI course; Preparation of a Lecture (5 credits per lecture); Conducting Tutorial; Faculty on other course; Trainer in ATLS (Advanced Trauma Life Support) / ACLS (Advanced Cardiac Life Support) / APLS (Advanced Paediatric Life Support) etc.

Audit:

Clinical Audit can be defined as the "systematic review and evaluation of current practice with reference to research based standards to improve patient care." The setting of standards, measurement of practice compared to 'gold standard', identification of deficiencies and addressing deficiencies (closing the loop) is an accepted model of clinical audit. Audit may include Departmental Audit Meetings; Critical Incident Meetings; Personal Clinical Audit; Measurement of individual compliance with guidelines protocols; Simulator training (ACLS/etc.); Skills Analysis; Department/Practice Audit; Directly Observed Procedures (DOPS); Individual Practice Review; Evaluation of individual risk incidents/ complaints; Patient satisfaction; Self-assessment; Peer review.

Protected Training Time:

Trainees are required to also keep a record in their Training Diary of any additional protected training time. This is described as "the time a trainee spends on-site in the hospital that is reserved for training purposes only, with no bleeps or obligations to attend work duties during the training session". Under the Organisation of Working Time Act, trainees are entitled to protected training time and in compliance with HSE regulations, trainees need to be in a position to provide proof of same.

Non-Clinical Days:

Trainees are required to keep a record of their activities during allocated non-clinical days. Non-clinical time is factored into a senior trainee's working schedule to promote participation in academic and research activities. These activities must be recorded in the trainee's e-Portfolio and provided at Exit Interview.

2.1 Initial Assessment of Competence

This Assessment is normally performed within three months of commencement of training. The Assessment reflects the skills which should normally be acquired by this stage and which are needed before undertaking the extra responsibility of on-call duties. It is a requirement to pass this assessment to progress to Theatre on-call. The results of this assessment should be recorded on the trainee's e-Portfolio. Full details of the IAC are available at <u>Initial Assessment of Competence</u>

2.2 Summary of Minimum Workplace Based Assessments ('WBA/s')

Workplace Based Assessments ('WBA/s') are designed to document the development of knowledge, clinical skill and attitudes as the trainee progresses through training. Please refer to <u>Appendix 3</u>: <u>Workplace Based Assessments</u> to determine the appropriate WBA, and see a pro-forma of the documentation required to complete a WBA. WBAs are an opportunity for trainees to receive formative feedback on their clinical performance. To maintain a steady pace during training it is recommended that a trainee complete WBA at a steady pace throughout their training. Each unit has a specified minimum number of WBA required before that unit can be completed. However, trainees are encouraged to do more than the minimum to develop their skills and knowledge wherever possible. Each unit therefore has a selection of WBAs which a trainee can avail of.

The volume of practice recorded by each trainee will be reviewed at the annual progression interviews. Case load and case mix will be influenced by hospital placement and clinical activity, however, each trainee will be assessed for participation and activity relevant to their peer group. The total minimum volume of practice requirements should be recorded as per each competency guideline. This is a minimum requirement to guide a trainee's clinical ability but a higher volume of practice may be required to develop expertise and mastery of the skill. This may vary depending on a trainee's aptitude, interests and the availability of opportunities to develop further.

Recommended Progression

SAT 1-2: 5 WBA per 6 month training period (Total Requirement 20) SAT 3-6: 4 WBA per 6 month training period (Total Requirement 32) Total Requirement 52

Core competency Units

Peri-operative Management

| Volume of Practice | | |
|-------------------------------------|-----------|----|
| Pre-operative assessment Clinics | | 10 |
| Post-operative round (PACU/HDU) | | 5 |
| Acute pain round | | 5 |
| Total minimum VOP: | | 20 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 2 |
| | CBD: | 4 |
| Available WBAs | DOPS: | 2 |
| | Mini-CEX: | 5 |

Airway Management

| Volume of Practice | | |
|-------------------------------------|------------------------------|-----|
| Bag-Mask Ventilation | | 30 |
| Supraglottic Airway | | 30 |
| Endotracheal Intubation | | 30 |
| Nasal intubation | | 5 |
| Video Laryngoscopy | | 10 |
| Fibreoptic intubation | | |
| Total minimum VOP: | | 110 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 2 |
| | CBD: | 12 |
| Available WBAs | DOPS: | 8 |
| | Mini-CEX: | 1 |
| Courses | | |
| Simulation | A-Crisis | |
| Course | Difficult Airways Management | |

General Anaesthesia for ASA I-II patients for Low-risk Surgical Procedures

| Volume of Practice | | |
|-------------------------------------|-----------------------------|--------------|
| Anaesthesia for ASA 1-2 patients | | 200 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 4 |
| Available WBAs | CBD: DOPS: Mini-CEX: | 5 11 3 |
| Courses | | |
| Simulation | Anaesthesiology Emergencies | |

Regional Anaesthesia (i) - Neuraxial and Foundation Peripheral Nerve Blockade

| Volume of Practice | | |
|-------------------------------------|------------------------|-----|
| Epidurals Total | | 70 |
| Lumbar (can include obstetrics) | | |
| Minimum 5 thoracic | | |
| Spinals Total: 70 | | 70 |
| (max. 30 obstetric) | | |
| Axillary nerve block | | 5 |
| Femoral nerve block | | 5 |
| Total minimum VOP: | | 150 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 4 |
| | CBD: | 4 |
| Available WBAs | DOPS: | 6 |
| | Mini-CEX: | 4 |
| Courses | | |
| Course | ISRA foundation course | |

Anaesthesia for Ambulatory Surgery

| Volume of Practice | | |
|--|----------------------------|--------------------------|
| ASA I&II Including paediatrics Including Elderly | | 160 (20) (20) |
| Including BMI >30 ASA III/IV Total | | (20) 40 200 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 2 |
| Available WBAs | CBD: DOPS: Mini-CEX: | 3 2 2 |

Anaesthesia for Orthopaedic Surgery

| Volume of Practice | | |
|-------------------------------------|-------|----|
| Hip fracture surgery | | |
| Internal fixation of long bones | | 10 |
| Elective hip arthroplasty | | 10 |
| Knee arthroplasty | | 10 |
| Shoulder surgery | | 5 |
| Arthroscopy | | 5 |
| Back surgery | | 5 |
| Total minimum VOP: | | |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 3 |
| CBD: | | 3 |
| Available WBAs | DOPS: | 2 |
| Mini-CEX: | | 3 |

Trauma Management

| Volume of Practice | | |
|-------------------------------------|--|-----------------|
| Trauma team member | | 15 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 2 |
| Available WBAs | CBD: DOPS: Mini-CEX: | 6 2 1 |
| Courses | | |
| Simulation | Anaesthesiology Emergencies; ARREST; PAE; Mascot | : 1/2; A-Crisis |

Transfer of the Critically Unwell Patient

| Volume of Practice | | |
|--|----------------------------|----------------------|
| Intra-hospital transfers: Inter-hospital transfers: Total minimum VOP: | | 25 5 30 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 1 |
| Available WBAs | CBD: DOPS: Mini-CEX: | 6 2 3 |
| Courses | | |
| Course | Transfer Course | |

Modular Units

Anaesthesia for General, Urological and Gynaecological Surgery

| Volume of Practice | | |
|---|-----------|-----|
| Emergency laparotomy | | 25 |
| Laparoscopic upper abdominal surgery | | 20 |
| Elective major open upper abdominal surgery | | 10 |
| Laparoscopic lower abdominal and pelvic surgery | | 20 |
| Elective major open abdominal & pelvic surgery | | 15 |
| Abdominal wall and perinealsurgery | | 20 |
| Endoscopic urological surgery | | 20 |
| Major per vaginal surgery | | 5 |
| Breast surgery | | 5 |
| Upper GI (gastro-intestinal) endoscopy | | 10 |
| Colonoscopy and per rectal procedures | | 5 |
| Total minimum VOP: | | 155 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 3 |
| | CBD: | 2 |
| Available WBAs | DOPS: | 11 |
| | Mini-CEX: | 4 |

Anaesthesia for Plastic and Reconstructive Surgery, including Burns

| Volume of Practice | | |
|---|--|----------------------|
| Reconstructive surgery Burns patient: resuscitation, and anaesthesia Total minimum VOP: | | 10 5 15 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 1 |
| Available WBAs CBD: DOPS: Mini-CEX: | | 3 - 1 |

Anaesthesia outside of the Operating Theatre including conscious sedation

| Volume of Practice | | |
|--|---------------|-------------|
| ECT | | 2 |
| Cardioversion | | 2 |
| Sedation | | 6 |
| Total minimum VOP: | | 10 |
| Workplace Based Assessments | | |
| | | |
| Required Workplace based assessment | | 1 |
| Required Workplace based assessment | CBD: | 1 |
| Required Workplace based assessment Available WBAs | CBD: DOPS: | 1 8 3 |

Regional Anaesthesia (ii) - Peripheral Nerve Blockade

| Volume of Practice | | |
|--|----------------------------|-----------------------------|
| Lower Limb blocks Upper limb blocks Other (trunk/thorax) Total minimum VOP: | | 25 25 10 60 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 3 |
| Available WBAs | CBD: DOPS: Mini-CEX: | 3 7 4 |

Anaesthesia for Ophthalmic Surgery

| Volume of Practice | | |
|-------------------------------------|-----------|----|
| Regional Anaesthetics | | 5 |
| General Anaesthetics | | 5 |
| Total minimum VOP: | | 10 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | nt | 1 |
| | CBD: | 7 |
| Available WBAs | DOPS: | 2 |
| | Mini-CEX: | - |

Anaesthesia for Otolaryngology, Oral and Maxillofacial, Head and Neck Surgery

| Volume of Practice | | |
|---|-------|----|
| Tonsillectomy and/or adenoidectomy | | 10 |
| Airway surgery | | 10 |
| May include: | | |
| Laser airway surgery | | |
| Microlaryngoscopy | | |
| Removal of foreign body from upper/lower airway | | |
| Tracheostomy | | |
| Head and neck surgery | | |
| Nasal surgery | | 1 |
| Thyroidectomy/parathyroidectomy | | 1 |
| Myringoplasty/middle ear surgery | | 1 |
| Neck dissection | | 1 |
| Mandibular fracture | | 1 |
| Total minimum VOP | | 25 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 2 |
| | CBD: | 4 |
| Available WBAs | DOPS: | 2 |
| Mini-CEX: | | 1 |

Anaesthesia for VascularSurgery

| Volume of Practice | | |
|--|---------------|----|
| Carotid endarterectomy | | 5 |
| Open surgery for peripheral vascular disease | | 5 |
| Major limb amputation | | 5 |
| AV fistula formation | | 2 |
| Abdominal aortic surgery | | 5 |
| Interventional radiological procedures | | 15 |
| Total minimum VOP: | | 37 |
| Workplace Based Assessments | | |
| | | |
| Required Workplace based assessment | | 2 |
| Required Workplace based assessment | CBD: | 6 |
| Available WBAs | CBD: DOPS: | |
| | | |
| | DOPS: | |

Anaesthesia for Neurosurgery and Neuroradiology

| Allocation | | |
|--|---|------------|
| 1 Month in accredited neurosurgical unit | | |
| Volume of Practice | | |
| Neurosurgical and neuroradiological procedures: Must include: minimum craniotomy May include: burr hole procedures, intervention vascular pathology | nal neuroradiological procedures for intracranial | 25 (15) |
| Spinal surgeries: | | 10 |
| Total minimum VOP: | | 35 |
| Workplace Based Assessments | | |
| Required Workplace based assessment 3 | | 3 |
| | CBD: | 6 |
| Available WBAs DOPS: | | 5 |
| Mini-CEX: 1 | | |

Anaesthesia for Cardiac and Thoracic Surgery

| Allocation | | |
|--|----------------------------|---|
| 1 Month in accredited neurosurgical unit | | |
| Volume of Practice | | |
| Cardiac Anaesthesia: total Minimum with cardiac bypass Thoracic Anaesthesia: total Minimum 2 thoracotomy Minimum 5 bronchoscopy Total minimum VOP: | | 20 (10) 10 (2) (5) 30 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 3 |
| Available WBAs | CBD: DOPS: Mini-CEX: | 13 2 2 |
| Courses | | |
| Course | Echo courses | |

Specialty Modular Units

Anaesthesia and Analgesia for Obstetric Care

Allocation

3 months in an accredited obstetric unit* with 6 month obstetric on call or 6 months in a specialty obstetric hospital *Appendix 4

| Volume of Practice | | |
|--|-----------|-----|
| LSCS | | 50 |
| (min 2 general anaesthetics); | | |
| min 5 epidural top-up) | | |
| Epidural for labour | | 50 |
| Management of post-partum complication | | 5 |
| Total minimum VOP: | | 105 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 3 |
| | CBD: | 11 |
| Available WBAs | DOPS: | 6 |
| | Mini-CEX: | 1 |
| Courses | | |
| Simulation | | |

Anaesthesia for PaediatricSurgery

| Allocation | | | |
|--|---|---|--|
| 6 months in Model 4 Paediatric Hospital | 6 months in Model 4 Paediatric Hospital | | |
| Volume of Practice | | | |
| Including minimum of age < 2 years between 2 and 16 years These cases should include a minimum of: minor emergency cases minor elective cases shared airway procedures (tonsillectomy, dental extraction, removed of inhaled Cases in remote area (e.g. CT, MRI) and/or paediatr Total VOP Age < 16 : | | 20 60 (20) (20) (20) 10 90 | |
| Workplace Based Assessments | | | |
| Required Workplace based assessment | | 3 | |
| Available WBAs | CBD: DOPS: Mini-CEX: | 7 11 4 | |
| Courses | | | |
| Simulation PAE, CDMP | | | |

Intensive Care Medicine

| Allocation | | |
|---|----------------------------|---------------|
| 3x2 months rotation in Intensive Care Medicine At least 2x2 months rotation in a JFICMI accredited ICU | | |
| Volume of Practice | | |
| Completion of logbook showing breadth of patient ca Involvement in multi-disciplinary ward rounds Attend Departmental training and education meeting Prepare and deliver a lecture as part of the Education Review and present at journal club meetings | js | |
| Workplace Based Assessments | | |
| Required Workplace based assessment 5 | | |
| Available WBAs | CBD: DOPS: Mini-CEX: | 9 20 16 |
| Courses | | |
| Simulation | SICC; | |
| Course BASIC; Beyond BASIC; Renal BASIC; Echo Courses | | |

Pain Medicine

| Allocation | | |
|--|----------------------------|---------------------------------|
| 2 month rotation Pain Medicine | | |
| Volume of Practice | | |
| Consultations Acute Pain Round Clinic - New Clinic – Review Ward - New | | 46 6 10 10 5 |
| Ward - New Ward – Review | | 15 |
| Procedures Epidural under x-ray Epidural under ultrasound Facet joint injection under x-ray | | 10 3 2 5 |
| Workplace Based Assessments | | |
| Required Workplace based assessment | | 2 |
| Available WBAs | CBD: DOPS: Mini-CEX: | 3 3 3 |
| Courses | | |
| CourseAttend one Faculty or IPS meeting and / or one prepared and delivered lecture (30 minutes) as part of Educational programme Additional/ optional at this level - Radiation protection course | | orogramme |

Appendix 3: Workplace Based Assessments

Workplace based assessments provide an opportunity for trainees to obtain feedback and for skill, knowledge and progression to be documented. There are three types of workplace based assessments, each with a different focus of knowledge, skill or behaviour.

A **Case Based Discussion (CBD)** involves a consultant and trainee reviewing a selected routine clinical case or an aspect of patient care, in which the consultant participated. The discussion is focused on the application of the trainee's clinical knowledge, and on their diagnostic ability and patient management skills.

Direct Observation of Procedural Skills (DOPS) involves a trainee being observed by a consultant whilst performing a specific clinical technical procedure in anaesthesia. DOPS are completed with patients, in real time, as part of routine clinical work. DOPS are an indicator of clinical skill and proficiency.

A **Mini Clinical Evaluation Exercise (Mini-CEX)** involves the consultant / supervisor directly observing the trainee completing a more extended activity and can be used to observe a wider range of competencies. A Mini-CEX is carried out in real time as part of routine clinical work. A Mini-CEX is an appropriate assessment tool for assessment of professionalism, including the behaviour and attitude of a trainee, and their interaction with their colleagues.

The trainee should seek feedback with each WBA. Feedback is designed to offer the trainee an insight into their performance on one procedure, case or event on one occasion only, and does not reflect or predict the trainee's overall ability. The feedback should be focused on highlighting aspects of the trainee's performance in a constructive manner and on the trainee's response and should be 'low stakes' in nature. A level of proficiency may be assigned to the specific WBA which demonstrates a trainee's proficiency on that single interaction. This is a formative assessment of the trainee's performance. However the overall trend may demonstrate the trainee's progress.

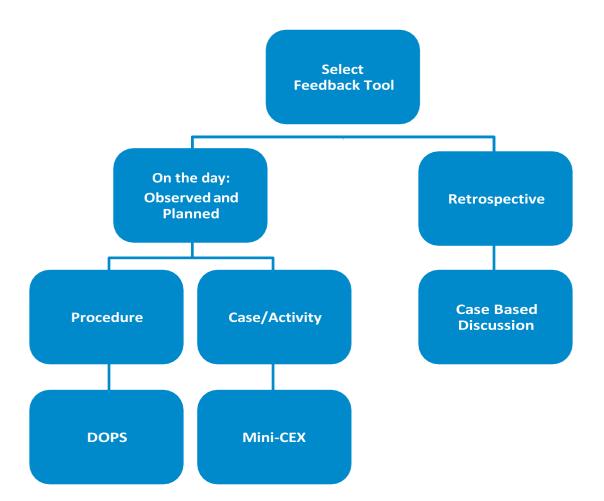
| Level | Milestone for WBA | Level of Proficiency |
|-------|--------------------------------|---|
| 1 | Pre-practice | Trainee has acquired knowledge and skills but insufficient to perform: not allowed to enact the activity. |
| 2 | Requires direct supervision | Trainee performs under full, proactive supervision: the supervisor is in the room. |
| 3 | Requires indirect supervision | Trainee performs under qualified, reactive supervision: the trainee asks for supervision or advice. |
| 4 | Ready for Independent practice | Trainee performs independently with backstage, mainly informal supervision. |
| 5 | Experienced practitioner | Trainee may provide supervision and instruction to junior learners. |

Trainees have primary responsibility for ensuring that they seek feedback and gather evidence, across a range of domains and for the range of competencies. The process generally involves a consultant observing and reporting on:

- Details of the case/procedure/event
- The competencies which were actually observed
- The feedback provided by a consultant to the trainee
- The response from a trainee, with a specific action/learning plan.

It is the responsibility of the trainee to record the interaction on their e-Portfolio. The template below reflects the template available on the trainee's e-Portfolio.

The following diagram highlights the key factors trainees and consultants consider in selecting which one to use in different circumstances.



Workplace Based Assessment Template

| Trainee's Name | |
|--|------|
| College ID | |
| Hospital | |
| Year of Training | Date |
| Observer's Name | |
| Observer's MC number | |
| Type of Workplace Based Assessment | |
| DOPS (Directly Observed Procedural Skill)Mini-CEX (Mini Clinical Evaluation Exercise)CBD (Case Based Discussion) | |
| Expected standard assessed | |
| Details of Case | |

| Feedback from Consultant | Level of Proficiency (2-5) | |
|---------------------------------|----------------------------|-------|
| Aspects of good performance | | |
| | | |
| | | |
| Suggested areas for development | | |
| | | |
| | | |
| Trainee response to feedback | (| |
| | | |
| | | |
| Specific learning plan | | |
| | | |
| | | |
| Trainee Signature | | Date: |
| | | |
| -Consultant Signature | | Date: |
| | | |

 $\label{eq:curriculum} Curriculum for the National Specialist Anaesthesiology \ Training \ Programme$

Appendix 4: Hospital Accreditation

Guidelines for Hospital Accreditation

Introduction

The College of Anaesthesiologists of Ireland ('CAI') is mandated as a National Training Body under the auspices of the Medical Council of Ireland ('Medical Council') to inspect and accredit all sites involved in the training of its specialist anaesthesiology trainees. This is done on a five yearly basis. Specialist Anaesthesiology Training ('SAT') for the awarding of a Certificate of Satisfactory Completion of Specialist Training ('CSCST') from the CAI, may only be undertaken in training sites which are accredited for training by the CAI. The main aim of the accreditation process is to ensure high quality training for CAI trainees. This process involves an assessment of:

- the quality and volumes of anaesthesia practice in the hospital;
- the training capacity of the hospital in terms of the numbers and levels of seniority of trainees;
- the availability and quality of training activities in the hospital, including clinical and academic.

Before a site is accredited for training, it is inspected by a team from the CAI. The site inspection will involve communication between the hospital and the College, with its trainees and other anaesthesiology NCHDs, with its anaesthesiology consultants, in particular the College tutors ('tutors') and hospital management. The inspection will provide feedback to the CAI from the inspectors on the quality of training in that institution and will provide support to the Anaesthesiology Department in achieving adequate resources and status within the hospital.

1. Medical Council Accreditation Standards for Evaluation of Training Sites

- (a) Clarity of Educational Governance Arrangements
- (b) Clarity of Clinical Governance Arrangements
- (c) Accountability
- (d) Induction Arrangements for Trainees
- (e) Clear Supervisory Arrangements for Trainees
- (f) Opportunities for training through clinical practice for trainees
- (g) Access to formal and informal education and training for trainees
- (h) Opportunities for trainers to train through protected training time
- (i) Access to resources which support directed and self-directed learning
- (j) Access to pastoral and health supports for trainees
- (k) Access to resources to maintain close contact with parent training bodies
- (I) Promotion of Medical Council guidance on professionalism, including promotion of current ethical guidance
- (m) Safe working environment
- (n) Specialty-specific supports
- (o) Participation in on-call duty rota
- (p) Support for assessment of trainees
- (q) Opportunities for multi-disciplinary teamwork
- (r) Opportunities for trainees to provide feedback to employing authority

2. The Accreditation Team

The President of the CAI will nominate a Council member to be the lead for Hospital Accreditations. Their title is Chair of Hospital Accreditation and they will report directly to the Training and Education Committee ('Training Committee'), to the College Council and to the President and Executive of the College as required.

The role includes the scheduling of inspections over a 5-year period; a review of applications; attendance at the inspections, creation of reports and recommendations; overseeing any appeals and an audit of activity.

Other members of the team will include members of the CAI Council, Directors of Training, members of the CAI Executive and administrative support from the Training Department. Representatives from the Faculties of the CAI may also be in attendance where appropriate for Intensive Care Medicine or Pain Medicine training inspection. Clinical inspectors need to be inducted and have a good knowledge of the current CAI Curriculum including the Training Regulations. They also need to be Fellows in Good Standing and involved in active clinical practice.

3. The Accreditation Process

A hospital accreditation may occur in the following circumstances:

- (a) A routine scheduled accreditation inspection as part of the five-year cycle;
- (b) An accreditation inspection of a new department;
- (c) An early site inspection triggered by urgent issues which include, but are not limited to, patient safety issues, urgent training issues, issues affecting the trainee or issues affecting the reputation of the CAI. These inspections may range from formal discussions with the tutor and head of department, to a full inspection;
- (d) A scheduled re-inspection arising out of concerns raised at a previous inspection.

4. Scheduled Inspection

All sites accredited for the CAI SAT programme, will have a scheduled inspection every 5 years. The CAI will make contact with the Anaesthesiology Department in advance of this inspection and will forward all documentation to be completed. The completed documentation and any external reports (e.g. HIQA 'Health Information and Quality Authority', Medical Council, Department of Health etc) will be reviewed by the Chair of the Hospital Accreditation Team in advance of the inspection. This will follow with an onsite inspection by the accreditation team on a mutually selected date.

The Chair of the Anaesthesiology Department ('Department Chair') and College tutor(s) must be available on the day of inspection. The inspection will include meeting with the Department Chair, tutors, available consultant staff and specialist anaesthesiologist trainees, Post SAT – CSCST Fellowship trainees, international trainees, non-scheme trainees and senior hospital management. An inspection of all facilities and a walk around of the hospital will also be conducted.

The Chair of the Hospital Accreditation Team will formulate a report, which will then be discussed at the next Training Committee meeting, and ultimately approved by the College Council.

5. Accreditation inspection of a new Department

The Chair of the Anaesthesiology Department of a hospital may apply to the CAI for consideration for accreditation for training. The department seeking accreditation must submit the application form and supporting documentation to the Training Department. All applications will initially be considered by the Training Committee.

If the application is accepted, an onsite inspection by the accreditation team will follow on a mutually selected date. The Department Chair and College Tutor must be available on the day of the inspection. The inspection will include review of the documents and interviews with the Department Chair, tutors, consultant staff, Anaesthesiology NCHDs and senior hospital management. An inspection of all facilities (as outlined on the application form) will also be conducted.

A report will then be brought to the Training Committee and subsequently to the College Council, who will take the final decision on approval of the site for training purposes. Allocation of trainees to a new site, will depend on annual intake and funding of training places.

If the application is not accepted, the Training Department will communicate this to the Chair of the Anaesthesiology Department.

6. Preparation for an Inspection visit

In advance of an accreditation inspection visit:

- (a) The Anaesthesiology Department will be provided with the required CAI accreditation form which assists the department in self-assessment of its performance, and may flag areas for further review;
- (b) Formal teaching and tutorial programmes should be made available;
- (c) Make available details of any other CPD programme being run by the Anaesthesiology Department;
- (d) All quality assurance and improvement programmes;
- (e) All research and audit activities;
- (f) All other clinical or academic activities relevant to the training of CAI trainees.

The end of rotation Trainee Review of the Hospital will also be inspected. A programme for the accreditation inspection visit should be drawn up and submitted to the Chair of Hospital Accreditation, two weeks in advance of the visit.

7. Outcomes from the Accreditation Inspection visit

At the end of the inspection visit, the Accreditation team will meet with the Department Chair and College Tutor(s) to discuss the visit, provide feedback and to discuss probable recommendations arising from the inspection. This will be an informal discussion only. The Chair of Hospital Accreditation will compile an inspection report and include recommendations, which will then be tabled for discussion at the next Training & Education Committee meeting. Any urgent issues needing immediate action will be dealt with by the College Executive. The Training Committee may make further recommendations or amendments to the report. The final report will be submitted for consideration by the College Council. The College Council is the final arbitrator of all hospital inspection reports. The final report and all recommendations will be sent to the Department Chair, tutor and senior management of the hospital.

A final letter will be sent to the Department Chair, tutor and copied to the Chief Executive Officer of the hospital with one of the following outcomes:

- (a) Fully accredited site. All accreditation standards and criteria have been met. The training site is accredited for 5 years from the date of inspection and is recognised for training.
- (b) Accreditation not approved. This relates in particular to new applications or applications for a change in training status. Where accreditation is not approved, feedback will be provided about what improvements would need to be made for accreditation to be granted. A new application and a full re-inspection would be necessary to determine if the hospital could be accredited once all the improvements have been made.
- (c) Conditional accreditation. The hospital site is granted full accreditation subject to corrective recommendations in relation to standards being made in a specified timeframe. A part or full re-inspection may be necessary. Ongoing monitoring will be required from the Chair of Hospital Accreditation. Full reports must be provided to the Chair by the site on progress to achieving the goals set out. Where recommendations are met, the site will be fully accredited for 5 years from the original inspection date. Where the site is not meeting recommendations, the CAI will consider withdrawing accreditation.
- (d) Withdrawal of accreditation. The CAI may withdraw accreditation from a training site, if that site fails to, or is unable to comply with CAI accreditation standards, and where this is having a significant impact on quality of training and/ or professional standards. A decision to withdraw accreditation from a training site, will be made by College Council. Withdrawal of accreditation may be by:
 - (1) Reduction in training post recognition for a particular level (e.g. SAT 5/6);
 - (2) Withdrawal of training recognition for a competency or module;
 - (3) Global withdrawal of training.

The College Council will consider any written appeals to reports or sanctions on training within 6 weeks.

The full documentation for procedures for Hospital Accreditation can be obtained by specific request to the Training Department.

Hospital Accreditation by Competency

| | Core Units | Peri-op | Airway | GA | Regional (i) | Ambulatory | Ortho | Trauma | Transfer | Modular Units | General/GU | Plastics | Outside Theatre | Regional (ii) | Ophthalmic | Otolaryngology | Vascular | Neuro | Cardiac/Thoracic | Specialty Units | Obstetrics | Paediatric | ICM (*J) | Pain Medicine | Senior on Call |
|--|------------|---------|--------|----|--------------|------------|-------|--------|----------|---------------|------------|----------|-----------------|---------------|------------|----------------|----------|-------|------------------|-----------------|------------|------------|----------|---------------|----------------|
| Beaumont Hospital | | | | | | | | | | | | | | | | | | | | | | | J | | |
| Cappagh National Orthopaedic Hospital | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connolly Hospital | | | | | | | | | | | | | | | | | | | | | | | | | |
| Coombe Women's Hospital | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cork University Hospital | | | | | | | | | | | | | | | | | | | | | | | | | |
| Crumlin (Children's Health Ireland) | | | | | | | | | | | | | | | | | | | | | | | J | | |
| Drogheda (Our Lady of Lourdes Hospital) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Galway (University Hospital) | | | | | | | | | | | | | | | | | | | | | | | J | | |
| Holles St (National Maternity Hosp) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Letterkenny General Hospital | | | | | | | | | | | | | | | | | | | | | | | | | |
| Limerick (University Hospital) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mater Misericordiae University Hospital | | | | | | | | | | | | | | | | | | | | | | | J | | |
| Mayo General Hospital | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mercy University Hospital, Cork | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mullingar (Midland Regional Hospital) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rotunda | | | | | | | | | | | | | | | | | | | | | | | | | |
| Royal Victoria Eye and Ear Hospital | | | | | | | | | | | | | | | | | | | | | | | | | |
| South Infirmary Victoria Hospital, Cork | | | | | | | | | | | | | | | | | | | | | | | | | |
| St James's Hospital | | | | | | | | | | | | | | | | | | | | | | | J | | |
| Sligo General Hospital | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tallaght University Hospital | | | | | | | | | | | | | | | | | | | | | | | J | | |
| Temple St (Children's Health Ireland) | | | | | | | | | | | | | | | | | | | | | | | | | |
| St Vincent's University Hospital | | | | | | | | | | | | | | | | | | | | | | | J | | |
| Waterford University Hospital | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wexford General Hospital | | | | | | | | | | | | | | | | | | | | | | | | | |

*J = Accredited by JFICMI for ICM

Note: This table reflects the position as at July 2020. Competency accreditation is subject to change. Up to date accreditation is maintained by the Training Department*

Appendix 5: Examination Syllabus

Please see exams page on the College Website for further details

Mandatory Courses

| Course | Medical Council Domain | Description | | | | | | | |
|---|------------------------------|---|--|--|--|--|--|--|--|
| Introduction to Anaesthesiology | 1; 6; 8 | One-day course for doctors commencing the training programme, outlining the knowledge, skills and behaviours required for the practice of basic anaesthesia. This course usually takes place in June prior to the commencement of the SAT programme. | | | | | | | |
| SAT 1 Professional Competence Development Programme | 2; 3; 4; 5; 7 | One-day programme which trainees attend during SAT 1. Topics include: understanding personal professionalism and the importance of competence understanding learning styles and team dynamics how to manage conflict developing communication and presentation skills | | | | | | | |
| Vascular Access Workshop | 6 | A workshop providing vascular access beyond peripheral venous cannulation. The course helps to develop skills in ultrasound and alternative access methods. Trainees usually attend this workshop during SAT 1/2. | | | | | | | |
| Professionalism in Practice Module | 2; 4; 5; 7 | The Professionalism Module consists of five course days and includes a theoretical basis of healthcare professionalism. Topics include: awareness of moral and legal theories awareness of ethics in healthcare including beginning of life and end of life decisions in critically ill and dying patients Trainees attend this module during SAT 5/6. | | | | | | | |
| Difficult Airways Management Workshop | 1; 8 | One-day workshop covering advanced approaches to securing the airway in emergency and elective scenarios. Trainees attend this module between SAT 4 - 6. | | | | | | | |

Simulation Syllabus

The College's Simulation Centre hosts simulation courses for SAT and other simulation-based educational events. The teaching on these courses is delivered by expert faculty with general and sub-specialty interest.

| Simulation Courses | Description |
|--|--|
| SAT 1-3 | |
| Anaesthesiology Emergencies | A simulation course covering anaesthetic emergencies arising from environmental and technical problems |
| ARREST (Anaesthesiology Related Rare Emergency Simulation Training) | A simulation course covering anaesthetic emergencies arising from rare clinical events |
| COAST (Crisis in Obstetric Anaesthesiology Simulation Training) | A simulation course covering obstetric and obstetric anaesthesia scenarios for doctors working in or about to work in Obstetric Anaesthesia posts |
| PAE (Paediatric Anaesthesiology Emergencies) | A simulation course covering paediatric emergencies and paediatric anaesthesia scenarios for doctors working in or about to work in Paediatric Anaesthesia posts |
| SICC (Simulation in Intensive and Critical Care) | A simulation course covering intensive care medicine scenarios for doctors working in or about to work in ICM |
| SAT 4-6 | |
| CDMP (Clinical Decision Making in Paediatrics) | A simulation course covering senior paediatric decisions and scenarios for doctors working in or about to work in Paediatrics at a senior level |
| A-CRISIS | A simulation course covering crisis management in the operating theatre |
| Managing Adverse Events (MAE)* | A multi-specialty simulation course covering anaesthesia and surgery ; covers both anaesthetic and surgical complications; covers technical and non-technical skills |
| Multidisciplinary Anaesthesiology Surgery Crisis Operation Training One (MASCOT 1)* | A multi-specialty simulation course covering anaesthesia and surgery ; covers both anaesthetic and surgical complications; covers technical and non-technical skills |
| MASCOT 2/Trauma | A multi-specialty simulation course covering anaesthesia, surgery and emergency medicine; non-technical skills |

* MAE/MASCOT 1 are interchangeable, a trainee will only be expected to attend one of these two courses

Additional Courses Recommended

Simulation Boot Camp

Currently available at St James's Hospital, St Vincent's University Hospital, Tallaght University Hospital, Sligo General Hospital, Letterkenny General Hospital and Galway University Hospital

Transport Courses

Transport of the Critically III MICAS (Mobile Intensive Care Ambulance Service)

Regional Anaesthesia

Irish Society of Regional Anaesthesia (ISRA)

Anaesthesia for Ophthalmic Surgery

Ophthalmic Anaesthesia Workshop

Anaesthesia for Cardiac and Thoracic Anaesthesia

Peri-operative echocardiography

Intensive Care Medicine

Echo Courses; BASIC; Beyond BASIC; Renal BASIC.

External Courses

There may be a requirement from individual hospitals to complete courses prior to performing certain clinical roles within the hospital. While these courses are neither provided, nor monitored by the College of Anaesthesiologists of Ireland, the College supports the requirements for all trainees on the training programme to fulfil the requirements to promote Patient Safety and Quality of Patient Care.

These courses may include, but are not limited to:

Hospital and HSE regulatory Courses

These courses are available through HSEland.ie

- Hand Hygiene
- 2) Children First
- 3) Risk and Incident Management
- 4) Haemovigilance training
- 5) Fire safety training
- 6) Manual Handling

Emergency Response Courses

- 1) Basic Life Support (BLS)
- 2) Advanced Cardiac Life Support (ACLS)
- 3) Advanced Paediatric Life Support (APLS)
- 4) Advanced Trauma Life Support (ATLS)

Appendix 7: CAI Competency Framework Hub

The Competency Framework Hub is available through the College website at <u>https://www.thecaihub.com/</u>. This is a digital resource hosting scenario videos of role-plays, PDF resources, EPA vodcasts, presentation videos, animations and hospital briefing presentations. It is a useful educational resource on how to give and receive effective feedback utilising the workplace based assessment tools recommended by the CAI.

Content of the CAI Competency Framework Hub

Tab 1: Home

Dr Camillus Power explains why competency based medical education matters

Explore

- Dr David Moore shares his experience of Feedback Reports
- DOPS in action with trainee who needs direct supervision
- Dr Martina Melvin, a SAT 5 trainee, shares tips for receiving feedback

Getting Started

- Introducing the competency based training programme
- Overview presentation on how to engage with EPAs and Feedback Reports
- Dr Josephine Boland shares how to getstarted

Resources for Consultants

- Overview for tutors, consultants and trainees (PDF)
- Overview presentation on how to engage with EPAs and Feedback Reports (PPT)
- A Quick guide to EPAs (PDF)
- General Anaesthesia 1 EPA(PDF)
- Vascular Access EPA (PDF)
- Managing Pain in Labour EPA(PDF)
- Paediatric Anaesthesia (Basic) EPA(PDF)
- Script for Dr Camillus Power video (PDF)
- Script for Dr Josephine Boland video (PDF)

Tab 2: Completing Feedback Reports

Animation outlining Feedback Reports

Feedback Reports in Action

- Mini-CEX in action with trainee dealing with an anxious patient
- Dr Ron Charles shares positive experiences of EPA project using Feedback Reports
- Dr Rebecca Fanning discusses Managing Pain in Labour EPA
- Dr Lua Rahmani Benefits of regular structured Feedback
- Dr Gabriel Beecham explains how feedback reports benefit trainees
- Dr Karthikeyan Srinivasan offers practical advice on completing feedback reports
- Dr David Moore shares his experience of Feedback Reports
- DOPS in action with trainee who needs direct supervision
- DOPS in action with trainee who is ready for independent practice
- Fieldnote in action with example of ineffective feedback
- Fieldnote in action with example of effective feedback
- Supervision scale in Practice
- How to use the Feedback Report APP (Mini CEX Vascular Access Demo)
- · How to save and return to draft report
- · How to filter reports visible on your dashboard
- How to share the content of your dashboard
- How to give feedback on your experience of using the app

'How to' Guides

- CAI Guidelines on Completing EPA Feedback Reports
- Medical Council's domains of good professional practice (PDF)
- Supervision scale for anaesthesia in Irish hospitals (PDF)
- Summary of fields in the app (PDF)

Tab 3: Giving Effective Feedback

Giving Effective Feedback vimeo

Feedback in Action

- Ineffective feedback conversation
- Effective feedback conversation
- Feedback conversation with the struggling trainee
- Feedback conversation with the high performing trainee
- A SAT 1 trainee, explains why feedback is important for learning
- A SAT 5 trainee, shares tips for receiving feedback
- A Post CSCST Fellow, talks about feedback in practice

'How to Guides'

- Tips on giving effective feedback (PDF)
- The advocacy enquiry method of feedback (PDF)
- Tips for receiving effective feedback (PDF

Glossary of Terms

| 'Anaesthesiology Department' | Anaesthesiology Department within the hospital |
|------------------------------|---|
| 'ARREST' | Anaesthesiology Related Rare Emergency Simulation Training |
| 'ASA' | American Society of Anaesthesiologists Classification |
| 'BASIC' | Basic Assessment and Support in Intensive Care |
| 'BMI' | Body Mass Index |
| 'CAI / College' | College of Anaesthesiologists of Ireland |
| 'CAT' | Committee of Anaesthesiology Trainees |
| 'CBD' | Case Based Discussion |
| 'CDMP' | Clinical Decision Making in Paediatrics |
| 'COAST' | Crisis in Obstetric Anaesthesiology Simulation Training |
| 'Council' | Council of the College |
| 'CPD' | Continuing Professional Development |
| 'CSCST' | Certificate of Satisfactory Completion of Specialist Training |
| 'СТ' | Computerised tomography |
| 'Curriculum' | Curriculum for the National Specialist Anaesthesiology Training Programme |
| 'DAS' | Difficult Airways Society |
| 'Department Chair' | Chair of the Hospital Anaesthesiology Department |
| 'Director/s' | Directors of Post Graduate Training and Education |
| 'DOPS' | Direct Observation of Procedural Skills |
| 'ECG' | Electrocardiogram |
| 'ECT' | Electro-convulsive therapy |
| 'e-Portfolio' | e-Portfolio for Training |
| 'ERCP' | Endoscopic retrograde cholangio-pancreatography |
| 'FCAI' | Fellowship Examination of CAI |
| 'GP' | General Practitioner |
| 'HDU' | High Dependency Unit |
| 'HSE NDTP' | Health Service Executive National Doctors Training & Planning |
| 'IAC' | Initial Assessment of Competence |
| 'ICAT' | Wellcome-HRB ICAT Programme |
| 'ICM' | Intensive Care Medicine |
| 'ICU' | Intensive Care Unit |
| 'ISRA' | Irish Society of Regional Anaesthesia |
| | |

| 'ITA' | In-Training Assessment |
|-----------------------|---|
| 'IV' | Intra-venous |
| 'JFICMI' | Joint Faculty of Intensive Care Medicine of Ireland |
| 'K/S/A' | Knowledge, Skill or Attitude |
| 'LAT' | Lead Anaesthesiology Trainee |
| 'LSCS' | Lower Segment Caesarean Section |
| 'MAE' | Managing Adverse Events |
| 'MASCOT' | Multidisciplinary Anaesthesiology Surgery Crisis Operation Training |
| 'MCAI' | Membership Examination of CAI |
| 'Medical Council' | Medical Council of Ireland |
| 'Mini-CEX' | Mini Clinical Evaluation Exercise |
| 'MRI' | Magnetic Resonance Imaging |
| 'NCHDs' | Non-Consultant Hospital Doctors |
| 'NSAIDs' | Non-steroidal anti-inflammatory drugs |
| 'PACU' | Post Anaesthesia Care Unit |
| 'PAE' | Paediatric Anaesthesiology Emergencies |
| 'PCS' | Professional Competence Scheme |
| 'Programme' | National Specialist Anaesthesiology Training Programme |
| 'SAT' | Specialist Anaesthesiology Training |
| 'SICC' | Simulation in Intensive and Critical Care |
| 'TIVA' | Total Intravenous Anaesthesia |
| 'Training Committee' | Training and Education Committee of the College |
| 'Training Department' | Training Department of the College |
| 'Training Programme' | National Specialist Anaesthesiology Training Programme |
| 'Tutors' | College Tutors |
| 'VOP' | Volume of Practice |
| 'WBA/s' | Workplace Based Assessment/s |



