MALAYSIAN MEDICAL COUNCIL

SPECIALTY-SPECIFIC REQUIREMENTS (SSR)

(ANAESTHESIOLOGY AND CRITICAL CARE)

Prepared By:

Specialty Education Subcommittee (SEC)

of the Medical Education Committee (MEC),

Malaysian Medical Council

Approved by the Malaysian Medical Council:

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Preface

1. The Specialty-Specific Requirements (SSR) pertain to requirements within each specialty and specify the minimum requirements pertaining to the training curriculum, trainers, educational resources and head of programme.

2. The Specialty-Specific Requirements (SSR) are intricately linked to the MMC Malaysian Standards for Medical Specialist Training 2019, and the Standards and SSR must be read and applied together.

Attachment 2

Specialty-Specific Minimum Requirements for Training Curriculum (Based on Area 1.2.4 of Malaysian Standards for Medical Specialist Training) - Anaesthesiology and Critical Care

<table>
<tr><th>Specialty-Specific Requirements
(Reference Standard)</th><th>Criteria</th></tr>
<tr><td>1) Minimum entry requirements for postgraduate training

(Standard 3.1.)</td><td>1. Fully registered with the Malaysian Medical Council with a current annual practising certificate

2. Successful entry evaluation into the programme</td></tr>
<tr><td>2) Minimum duration of training programme

(Standard 1.2.4 - Table 2)</td><td>Completion of a minimum of 48 months of specialised training in the specialty programme</td></tr>
<tr><td>3) Structure of training (rotation/modules)

(Standard 1.2.4 - Table 3 & Table 4)

Training overview

Training rotation/modules and case mix</td><td>The program should have a clear pathway encompassing phases of training which shall include the basic, intermediate and advanced components in anaesthesiology and critical care with progressively increasing levels of responsibility in care delivery.

<table>
<tr><th>Areas</th><th>Details</th><th>Minimum Duration (Months)</th></tr>
<tr><td>Anaesthesiology and Critical Care</td><td></td><td>48</td></tr>
<tr><td>General Anaesthesiology</td><td>Peri-anaesthesia care for patients requiring:</td><td></td></tr>
<tr><td></td><td>General Surgery ((including hepatobiliary, vascular, upper and lower gastrointestinal, endocrine surgeries)</td><td>4</td></tr>
<tr><td></td><td>Plastic & reconstructive Surgery/Urological surgery</td><td>1</td></tr>
<tr><td></td><td>Orthopaedics</td><td>4</td></tr>
<tr><td></td><td>Gynaecology</td><td>4</td></tr>
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</table>

	Ophthalmology	1
	ENT	1
	Dental & Oral and maxillofacial surgery	1
	Non-operating room anaesthesia	1
	Daysurgery	1

The following Anaesthesiology subspecialty rotations will be counted towards the 48 months of training.

Subspecialty and Critical Care Rotations	**Details**	**Minimum Duration (months)**
Intensive Care		6
Obstetric Anaesthesia		4
Acute & Chronic Pain		1
Perioperative Medicine/Medicine **		2
Neuroanaesthesia & Critical Care		2
Paediatric Anaesthesia & Critical Care		2
Cardiothoracic Anaesthesia & Critical Care		2
Regional Anaesthesia		1

The following rotations will be counted towards the 48 months of training.

Additional rotations	From general anaesthesiology above or subspecialty and critical care rotations	7
The above additional rotations or other rotations relevant to anaesthesiology and critical care	Transplant, robotic surgery, bariatric surgery, retrieval medicine, traumatology, anaesthesia in conflict zones/ limited resource settings, hyperbaric medicine,	3

	research, education, human factors, medicolegal		

*Duration of training per year is 48 weeks
** Medicine is a specialty rotation

4) Assessments (Standard 2.2.1)	Assessments should i. Employ appropriate methods and levels that are well-aligned with learning outcomes. These include a variety of methods and tools such as written assessments, clinical assessments, supervisor's report, training portfolio, logbook, and research report. ii. Include methods appropriate to assess communication skills, ethics and professionalism. iii. Include formative and summative assessments throughout each rotation, semester, or year of study. iv. Include clear criteria for progression to next level of study. v. Include an exit evaluation/assessment.
5) Additional requirements for completion of training (Standard 1.2.4)	i. Completion of graduate-level research or clinical audit project
6) List of competencies to be acquired upon completion of training (Standard 1.1.4)	**Generic Competencies** Able to i. Diagnose, investigate and manage patients requiring anaesthesia and critical care whilst considering social and health economics aspects ii. Anticipate and manage complications iii. Work independently and in teams competently and professionally iv. Practise good ethical conduct v. Practise good communication skills vi. Perform critical review, plan and conduct scientific research vii. Exemplify self-advancement through continuous academic

	and/or professional development including digital health viii. Apply evidence-based medicine in the field of anaesthesiology and critical care ix. Demonstrate exemplary leadership qualities in the multi-disciplinary team in the management of patients requiring anaesthesiology and critical care x. Demonstrate an entrepreneurial mindset, creative problem-solving and resilience **Specialty Specific Competencies** 1. The specialist is ready to undertake the duties Anaesthesiologist safely with considerable independence. The duties include: a. Broad categories i. Independently provide and supervise care of patients in anaesthesia and intensive care settings ii. Make decisions and take actions to meet identified physiological and surgical needs: deliver analgesia, anaesthesia, and organ support care iii. Work in collaboration in a multidisciplinary team to meet the needs of patients of all ages iv. Fulfil the role of provider, perioperative care expert, supervisor, teacher and effective team player in the clinical setting v. Be a self-directed learner in anaesthesia, intensive care and related disciplines Specific competencies are the ability to perform the following: i) Perioperative assessment and management of ASA I to V patients ii) Ensure safe and reliable anaesthesia delivery system iii) Management of the difficult airway iv) Provision of analgesia and acute pain management v) Intensive care management of the critically ill patient vi) Management of the brain-dead patient vii) End-of- life care viii) Transport of the critically ill patient ix) Management of labour analgesia

Note : These criteria represent the minimum standards. Each educational programme provider may exercise their autonomy to state criteria above and beyond these minimum standards.

Attachment 4

<table>
<tr><th colspan="3">Specialty-Specific Minimum Requirements for Training Centres and Head of Programme (Based on Areas 3-6 of Malaysian Standards for Medical Specialist Training) -
Anaesthesiology and Critical Care</th></tr>
<tr><th>Item No</th><th>Specialty-Specific Requirements

(Reference Standard)</th><th>Criteria</th></tr>
<tr><td>4</td><td>Trainer-to-trainee ratio

(Standard 3.1.3)</td><td>1:4</td></tr>
<tr><td>5</td><td>Minimum qualifications and experience of trainers

(Standard 4.1.2)</td><td>i. Registered with National Specialist Register

ii. Completed Training-of-Trainer course/equivalent</td></tr>
<tr><td>6</td><td>Minimum requirements for educational resource

(Standard 5.1.1)</td><td>The diagnostic facilities and equipment requirement of the programme training centres must collectively be able to accommodate the following minimum requirement:

i. Physical Facilities

a. Tutorial rooms
b. Teaching facilities with conference capabilities
c. Library facilities with journal access
d. Facilities for computer and internet
e. Interactive spaces
f. Access to simulation facilities (optional)

ii. Services Areas

<table><tr><th>Service Areas</th></tr><tr><td>Operation theatres with Post Anaesthetic Care areas</td></tr><tr><td>Ambulatory Anaesthesia Services</td></tr></table></td></tr>
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Labour rooms equipped with labour epidural facilities
Facilities for non-operating room anaesthesia, for example ECT, Endoscopy suites, radiology suite
Acute Pain Services and Pain Clinic
Level 3 Intensive Care Units
Anaesthesia Clinic for preoperative assessments

iii. Equipment

Equipment
Standard anaesthesia delivery systems
Standard and advanced patient monitoring systems
Video laryngoscopy systems
Flexible Intubation video endoscopy system
Ultrasound machines for vascular access, peripheral nerve block and point-of-care
Equipment for Level 3 Intensive Care Units
ICU equipment that caters to support two or more major organ failures

iv. Case Load and Case Mix

The caseload of the programme training centres must **collectively** be able to accommodate the following minimum average requirement for **each trainee.**

Types of Cases	**Minimum Quantity of cases per trainee per year**
Perioperative and	

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<tr><td>Anaesthesia Care (inclusive of Perioperative Medicine, Pain Services and Regional Anaesthesia; and various patient populations)</td><td>200</td></tr>
<tr><td>Intensive care

(Total patient encounter)</td><td>150</td></tr>
<tr><td>Intensive care

(New cases)</td><td>15</td></tr>
</table>
These cases may be shared amongst trainees, considering work hours and team-based care
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<tr>
<td>7</td>
<td>Minimum qualifications and experience of Head of Programme

(Standard 6.2.2)</td>
<td>i. 5 years or more of working experience after national specialist registration

ii. Experience in administration and/or academic management</td>
</tr>
</table>

Note : These criteria represent the minimum standards. Each educational programme provider may exercise their autonomy to state criteria above and beyond these minimum standards.

ACKNOWLEDGEMENT

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