Emergency Medicine Postgraduate Training in Malaysia

GUIDE FOR APPLICANTS

VERSION 1, 2020

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Preface

What is this document?

This document is a guide for those applying to enter postgraduate training in Emergency Medicine. It contains information on the entry requirements for the specialty training programme, the selection process and what training entails. It is an extract from the National Postgraduate Medical Curriculum for Emergency Medicine and provides key summaries about the training structure, syllabus and assessments.

The National Postgraduate Medical Curriculum

The Emergency Medicine curriculum is a product of a collaborative effort by members of the Curriculum Committee appointed by the Specialty Conjoint Committee for Emergency Medicine (SCCEM), which consists of Emergency Physicians from the Ministry of Education and the Ministry of Health. Development of this curriculum involved an extensive review of the Emergency Medicine training curricula incorporating the latest educational principles, as well as reflecting on and incorporating the specialty needs and function.

This will be the common curriculum for training in Emergency Medicine, and trainees have the option to train either through a Master's Degree programme and take the university examinations, or to train entirely in Ministry of Health hospitals and take the Fellowship of Royal College of Emergency Medicine (FRCEM) UK examinations.

This single curriculum sets the common standard for Emergency Medicine training to deliver high quality, effective and safe patient care across the whole of Malaysia.

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Introduction

Purpose of this guide

The purpose of this guide is to inform prospective applicants seeking a career in Emergency Medicine. It summarises the key aspects of the Emergency Medicine curriculum (entry requirements, process, training structure, assessments, some documentation and exit criteria) and provides a guide as to how to prepare and proceed with the application.

What is Emergency Medicine?

Emergency Medicine is a medical specialty that is concerned with providing the initial and immediate care for patients with illnesses or injuries, such as from accidents, sudden unexpected acute illnesses or exacerbations of chronic diseases. It also encompasses ambulance services to transport patients to an emergency department of a hospital. Patients are treated and stabilised until their care is transferred to another specialty or they are discharged.

The role of an Emergency Physician

Specialists in Emergency Medicine, also known as Emergency Physicians, have a broad range of the knowledge and skills required to care for patients with a wide variety of acute illnesses and injuries. Emergency Physicians mainly work in an emergency department of a hospital where they have many medical staff working under their supervision. The Emergency Physicians' roles are to oversee, supervise and coordinate the care of patients in the emergency department. They also coordinate the delivery of emergency medical care outside of hospital and the organisation of ambulance services. Having good interpersonal skills, teamwork and mutual respect is important to Emergency Physicians since they work closely with other clinical disciplines as well as with the public.

Size of the specialty

There are approximately 150 emergency departments in Malaysia and about 350 Emergency Physicians currently practicing within them, providing care for 8 million emergency department visits annually. With the growth of the population, economy, modernisation and globalisation, we expect to continue to see high numbers of traffic accidents, industrial injuries, infectious disease cases and patients from an older age group. Increasing occurrences of natural disasters, threats of bioterrorism and wars also contribute to the need for preparedness, continuous expansion and the improvement of emergency care delivery. The current target for Malaysia is to achieve at least 900 Emergency Physicians to meet the needs of the country's emergency healthcare system.

Unique features of the specialty

What makes Emergency Medicine unique is the environment in which medicine is practiced. Patients are seen without needing prior appointments with a myriad of illnesses or injuries. These are the undifferentiated patients, meaning that they present with symptoms and signs rather than a diagnosis. Emergency Physicians see a greater number of undifferentiated patients compared to any other medical specialties. To suit the high volume and high acuity environment in which they work, Emergency Physicians have evolved in their approach and strategies in diagnosing and treating patients. They differentiate quickly the very sick from the less sick. They focus on ruling out life-threatening illnesses, while also considering a wide differential of other potential disease processes. Another unique feature of Emergency Medicine is the provision of emergency medical care outside of hospitals such as during disasters or major incidents involving mass casualties and CBRNE incidents.

Why choose Emergency Medicine as a career?

Emergency Medicine will appeal to those who enjoy a fast-paced specialty with a rapid turnover of patients, and where their

quick decisions and actions often make the difference between life and death. It challenges the trainee to think fast on their feet, to work effectively as a team and be ready for the next task. The patients and conditions encountered are different every day, and therefore it is a specialty that attracts trainees who prefer variety in their everyday work. The scope of practice in prehospital care means that there is opportunity to work outside of hospital. Emergency Physicians are attracted to the prospect of providing emergency care be it on land, air, water or beyond borders and are often outgoing, adventurous, and enjoy outdoor activities. Sub-specialisation opportunities for Emergency Physicians include disaster medicine, medical toxicology, critical care medicine, wilderness medicine, emergency ultrasonography, paediatric emergency, prehospital care and traumatology.

1. The Emergency Medicine Programme

Training pathways

There are two pathways for attaining the qualifications as a specialist in Emergency Medicine: the Master's degree programme through the Ministry of Education (MOE) pathway and the MOH-FRCEM programme through the Ministry of Health (MOH) pathway.

The minimum training duration in the MOE Master's degree programme is 4 years, and the maximum is 7 years. The 4 stages of the programme correspond to years 1 to 4, however the duration of each stage may extend beyond a year depending on the trainee's progress.

The minimum training duration in the MOH-FRCEM programme is 5 years, and the maximum is 7 years. The stages of the programme follow the Royal College of Emergency Medicine (RCEM) UK requirements.

The single curriculum ensures that both pathways have a common set of standards for in-training contents and experiences, supervision and assessments. The main difference is the examinations that trainees take: university examinations for the Master's Degree programme, and FRCEM UK examinations for the MOH-FRCEM programme.

Stages of training

During the early stages of training, trainees undergo clinical rotations in Emergency Medicine and in other disciplines that include; Intensive Care Medicine, Paediatrics and General Medicine. This is designed to provide exposure and learning opportunities to develop the composite acute and critical care knowledge and skills essential to Emergency Medicine practice. Other clinical rotations are also possible depending on the institutional facilities, to ensure the appropriate coverage of the syllabus.

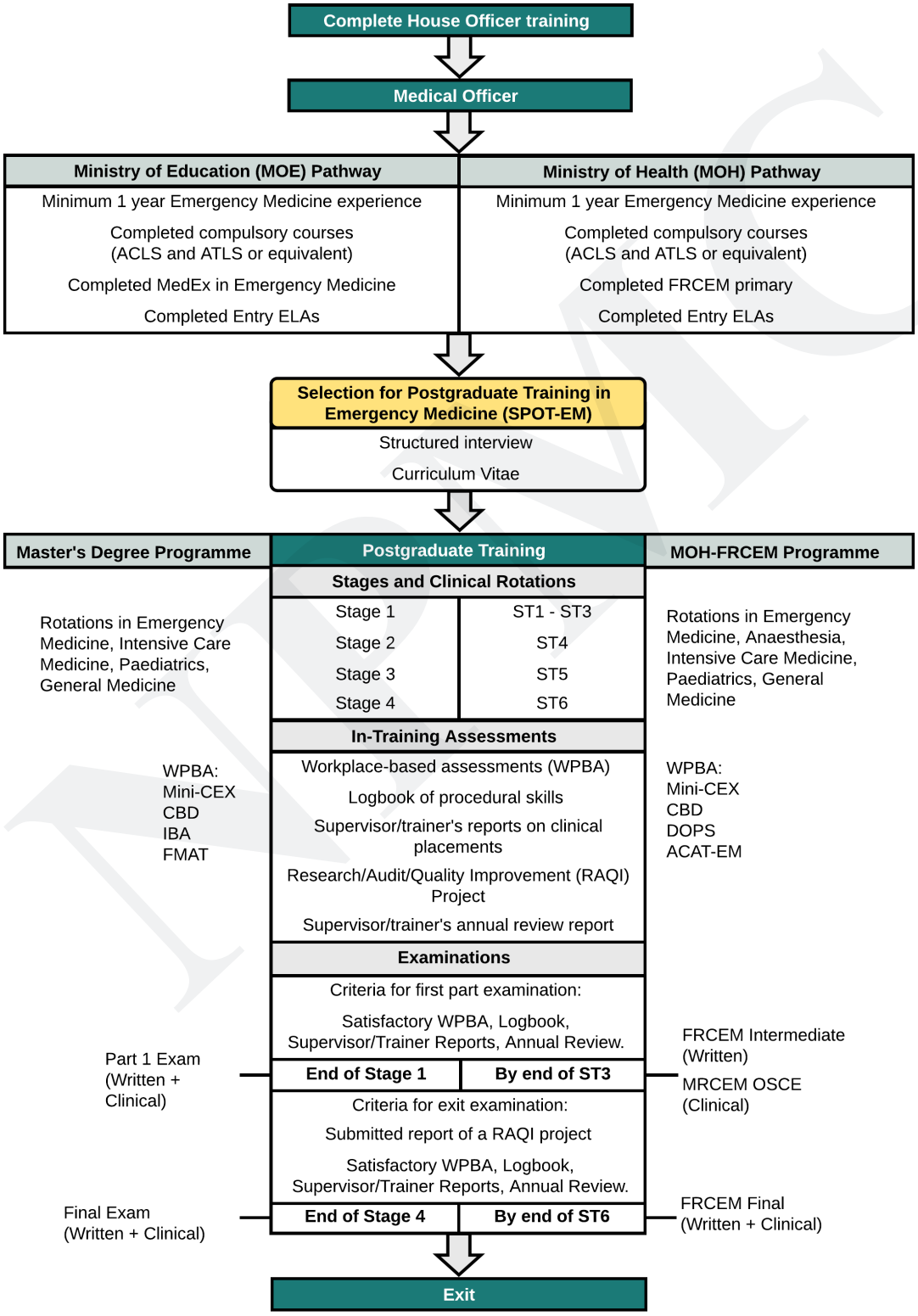
During the later stages of training, trainees spend their major training component in Emergency Medicine. Further and more in-depth learning in Emergency Medicine is expected throughout the later stages.

In-training assessments are scheduled throughout the training and include workplace-based assessments (WPBA), a logbook of procedural skills, research/audit/quality improvement (RAQI) project, and a supervisor's/trainer's report. An annual review is scheduled at the end of each year to monitor the trainee's progress.

Trainees in the MOE Master's degree programme are expected to start their research/audit/quality improvement (RAQI) project at the start of Stage 2 (year two), and are required to submit their research dissertation at least six months before the Final Examination. Trainees in the MOH parallel programme can begin their quality improvement project (QIP) at any time during the early stages and submit their QIP from ST4 (year 3) onwards.

Figure 1 on the following page summarises the training pathways and the key training stages.

Figure 1: Emergency Medicine training pathways and the key training stages.



2. Entry Requirements

Table 1 below summarises the entry requirements for Emergency Medicine training:

No	Criteria	Master's degree programme	MOH-FRCEM programme	Evidence on application
1.	A primary medical qualification (MD, MBBS, MBBCh or equivalent) approved to be registered for medical practice by the Malaysian Medical Council (MMC). Applicants with medical qualifications from unscheduled universities are required to pass the MMC Examination for Provisional Registration (EPR).	√	√	Certificate
2.	Full registration with the MMC (Malaysian applicants), or the medical licensing authority of the last country of practice (international applicants).	√	√	Malaysian applicants: Annual Practicing Certificate International applicants: Letter of Good Standing
3.	English language proficiency (international applicants) (e.g. IELTS/MUET/TOEFL/OET).	Achieved acceptable level as defined by the university.	IELTS level 7 is the expected standard for the FRCEM examinations.	Certificate
	The evidence for the following requirements must be presented during the Selection for Postgraduate Training in Emergency Medicine (SPOT-EM):			
4.	Minimum ONE (1) year of Emergency Medicine experience as a fully registered medical officer.	√	√	Service/training records or Letter of verification from Head of Department
5.	Successfully completed advanced cardiac life support (e.g. ACLS, ALS) and trauma life support (e.g. ATLS) course training.	√	√	Certificate
6.	Completed pre-specialty training examination in Emergency Medicine.	Medical Specialist Pre-Entrance Examination (MedEx)	FRCEM Primary	Certificate/ Transcript of results
7.	Completed all Entry Essential Learning Activities (Entry ELAs).	√	√	Logbook

Entry Essential Learning Activities (ELAs)

Entry ELAs are clinical activities that prospective trainees should be able to perform in a trustworthy manner by the time they enter the postgraduate training in Emergency Medicine. The Entry ELAs have been selected to represent the typical and basic day-to-day work in Emergency Medicine. They indicate the knowledge, skills and attitudes that the trainees need to be aware of when carrying out the tasks and responsibilities. They also serve as learning opportunities for prospective trainees when they are tasked to undertake the activities and then receive feedback regarding their performance.

Entry into the Emergency Medicine training is after completion of pre-registration (housemanship) training and at least one year of post full registration clinical experience in an emergency department. It is essential that prospective trainees can demonstrate that their clinical experience has resulted in them having acquired the appropriate knowledge, skills and attitudes that prepares them for postgraduate training in Emergency Medicine. This is demonstrated through the Entry Essential Learning Activities (Entry ELAs).

There are six Entry ELAs for Emergency Medicine:

ELA 1	Performing focused history taking and examination
ELA 2	Recognition and initial management of patients with possible obstructed airway
ELA 3	Recognition and initial management of patients in respiratory distress or failure
ELA 4	Recognition and initial management of patients with hypotension and shock
ELA 5	Recognition and initial management of patients with ST-elevation myocardial infarction
ELA 6	Obtaining informed consent for procedures

Applicants for the postgraduate training in Emergency Medicine are expected to present their logbook of procedures and activities during the Selection for Postgraduate Training in Emergency Medicine (SPOT-EM), as evidence that they have completed all Entry ELAs, and may expect to be asked questions during the selection process about their Entry ELAs.

Each Entry ELA describes the knowledge, skills and attitudes that a prospective trainee is expected to possess, as well as the desired positive and undesired negative and negative passive behaviours. Entry ELA1 is presented in **Table 2** as an example. The complete set of the six Entry ELAs can be found in the appendices of this document.

Table 2: Entry ELA-1

Activity	Performing focused history taking and clinical examination
Description	This ELA involves obtaining history and performing clinical examinations tailored to the emergent assessment and management of emergency department patients. This ELA includes gathering relevant clinical data in the presence of acute severe illness or life-threatening conditions where rapid but accurate and reliable patient assessment is crucial.

Knowledge (Know, facts, information)	**Skills** (Do, practical, psychomotor, techniques)	**Attitudes** (Feel, behaviours displaying underlying values or emotions)
Pertinent history elements in presenting complaints. Symptoms and signs that indicate unstable or life-threatening features. Differential diagnoses based on presenting symptoms and signs.	Clinical reasoning skills – gathers pertinent information targeted to the chief complaints and relevant to patient care. Clinical assessment skills – performs clinical examination in a logical sequence, elicits clinical signs and interprets them correctly. Communication skills – uses appropriate language, listens to the patient appropriately, observes patient's verbal and non-verbal cues.	Be attentive and inquisitive to patient's narratives. Shows empathy and compassion. Shows respect for privacy, dignity and confidentiality. Shows a sense of urgency in appropriate situations. Keeps calm under stress. Knows own limitations and asks for help in situations of clinical uncertainties.
Example Behaviours		
Positive (Things that should be done, correct techniques or practices, things a trainee might do right)	**Negative** (Things that should not be done, incorrect techniques or practices, things a trainee might do wrong)	**Negative passive** (Things that may be forgotten or omitted that constitute incorrect or substandard patient care, things a trainee might forget to do)
Prioritises and addresses key presenting issues of chief complaints. Modifies approach to clinical history taking and examination appropriately depending on the clinical condition. Revisits history and physical exam to address incomplete information. Initiates simultaneous basic critical interventions appropriately. Keeps patient appropriately covered during examination.	Obtains, records and presents inaccurate or irrelevant history or clinical findings.	Missing key information. Does not obtain collateral history where necessary. Fails to record or report relevant negative findings. Unaware of patients deteriorating during data gathering.
Assessment/Evidence		
Logbook SPOT-EM interview		

3. Entry Process

Prospective trainees who want to enter the postgraduate training in Emergency Medicine and who have fulfilled all the entry requirements **(Table 1)**, may apply online through MOH (for MOH-sponsored trainees) or to the university of their choice (for university trainees, private applicants and international applicants). There are currently three universities that offer the Master's Degree programme in Emergency Medicine: USM, UKM and UM.

Eligible candidates will be invited to attend the selection process known as the Selection for Postgraduate Training in Emergency Medicine (SPOT-EM). Applicants should prepare a Curriculum Vitae, all the relevant original certificates, and their Logbook to bring with them to the SPOT-EM. After the selection process, applicants will be informed by the MOH and the university respectively of the outcome of their application.

Figure 2 below is the flowchart of the entry process.

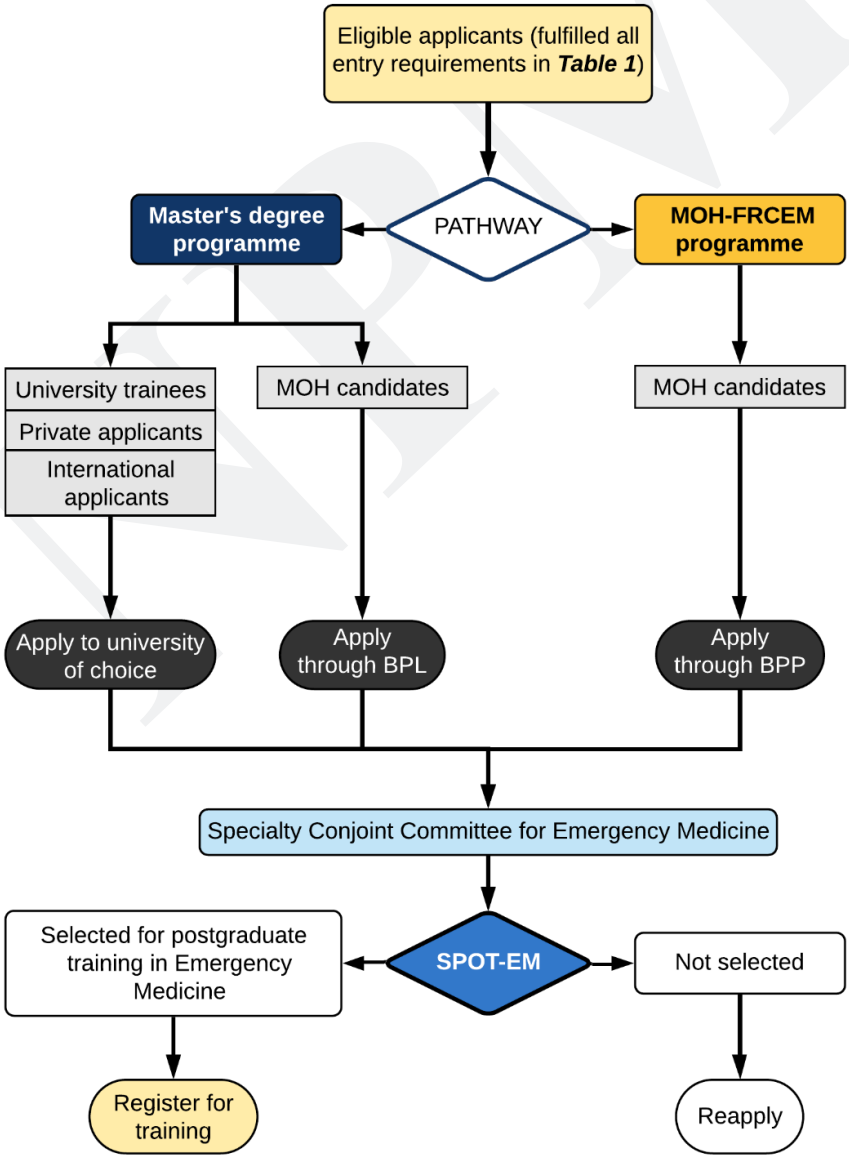


Table 3 summarises the timelines for the entry process:

Timeline*	Master's Degree Programme		MOH-FRCEM Programme
	University trainees/ Private applicants/ International applicants	MOH candidates	MOH candidates
All year round	Application to universities		Application to Bahagian Perkembangan Perubatan (BPP)
July - August		Application to Bahagian Pengurusan Latihan (BPL)	
September - October	Universities check and review applications	MOH checks and reviews applications	
October - December	Specialty Conjoint Committee for Emergency Medicine (SCCEM) receives and reviews applicant lists from universities and MOH		
December	Notification to applicants to attend Selection for Postgraduate Training in Emergency Medicine (SPOT-EM)		
January	SPOT-EM		
April	Notification of outcome of application		

**Dates subject to variability.*

4. Syllabus

The syllabus defines what will be taught and learned throughout the training as an Emergency Medicine specialist. It details the generic and specialty-specific breadth of knowledge, skills and attitudes that a trainee needs to attain and apply to patient care.

Trainees in Emergency Medicine will encounter a wide range of patient presentations and disease conditions. Patients are seen in a unique work environment that requires specialised services and leadership. To reflect this, the topics in the syllabus are structured into four main themes **(Figure 1)**. At the core is knowledge, skills and attitudes essential for the clinical management of patients. Effective clinical patient management is supported by the organisation and leadership of the emergency medical system and services, the mechanisms in practice to ensure patient safety, and patient care that is well informed by scientific evidence **(Figure 3)**.

The syllabus organises the four main themes to be learnt in the following way:

1. The syllabus lists the topics for knowledge and skills for each of the four main themes (CPM, EMSS, PSMI, REBM).
2. The syllabus defines the depth of knowledge for the topics that trainees need to know ('Knowledge Levels'), and the level of proficiency for procedural skills ('Skills Levels') that need to be learnt.
3. The 'Knowledge Levels' and 'Skills Levels' are mapped to the stage of training. This defines the expectations of the level of knowledge and skills that a trainee needs to achieve to demonstrate progression from one stage to the next stage.

The Emergency Medicine programme is structured as a spiral curriculum **(Figure 4)**. This means that trainees are exposed to multiple and varied clinical encounters throughout all stages of training. This reinforces learning each time the trainee revisits the subject matter or re-encounters similar patient presentations.

Trainees are expected to acquire deeper learning and increased expertise when new knowledge and skills are built on the previously acquired knowledge and skills.

Figure 3: The four main themes in the syllabus for Emergency Medicine.

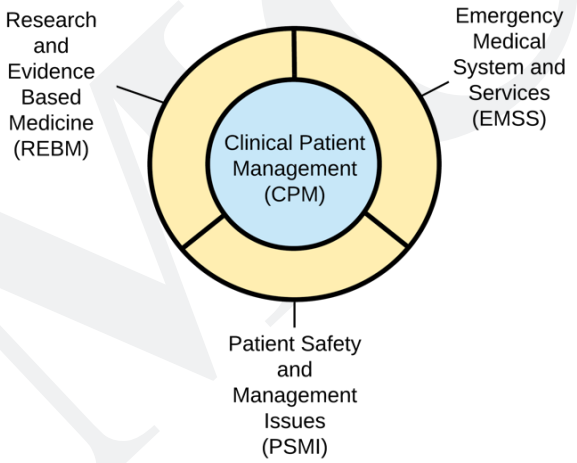


Figure 4: The spiral curriculum.

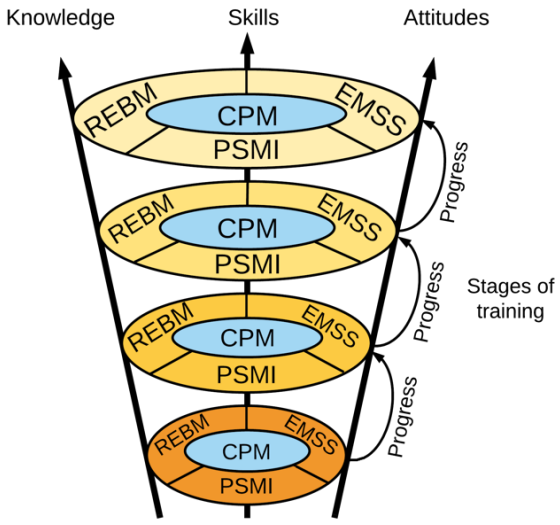


Figure 5 and **Figure 6** on the following page summarise the major topic headings in the knowledge and skills syllabus for the four main themes.

Figure 5: Knowledge syllabus.

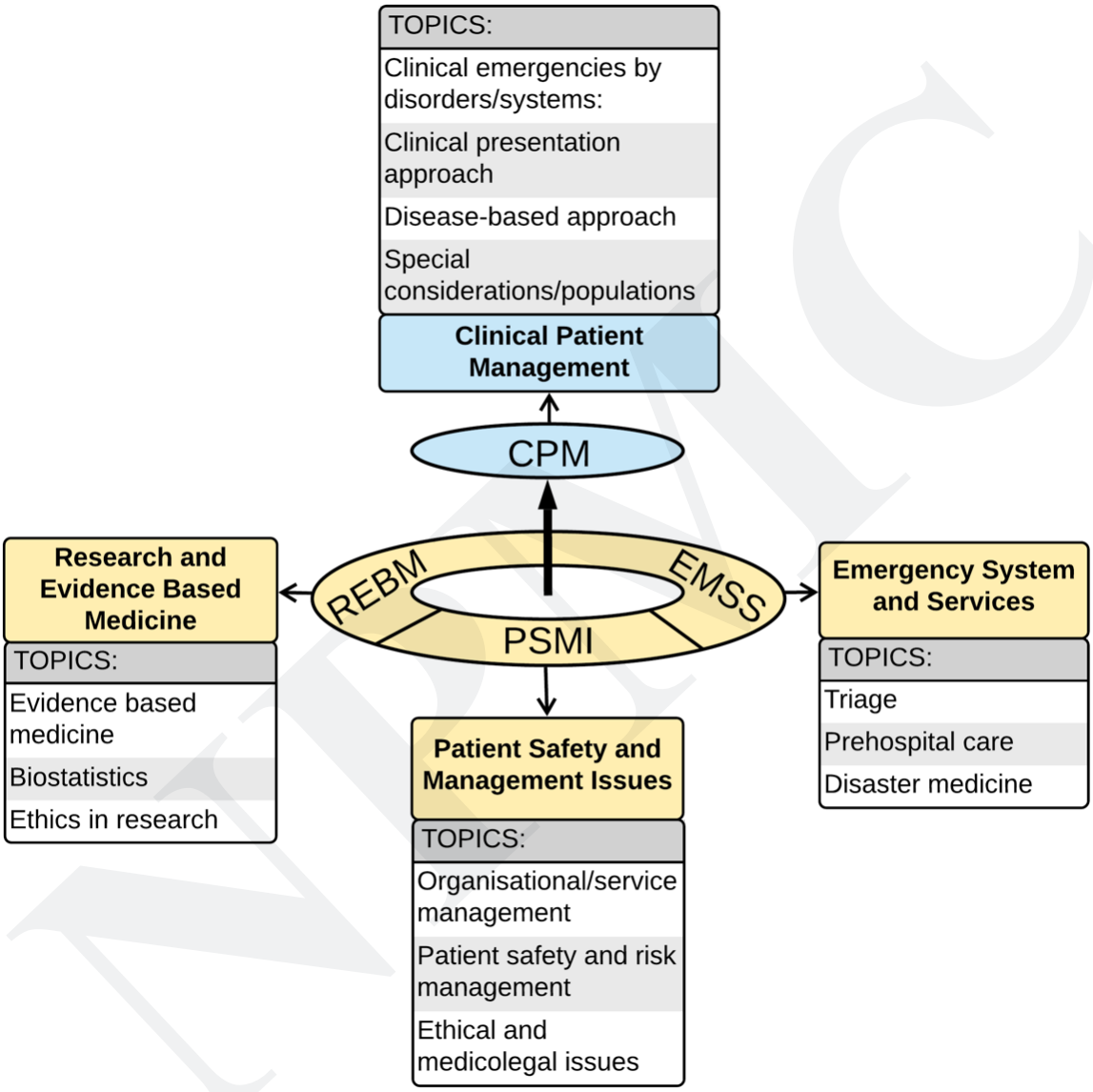
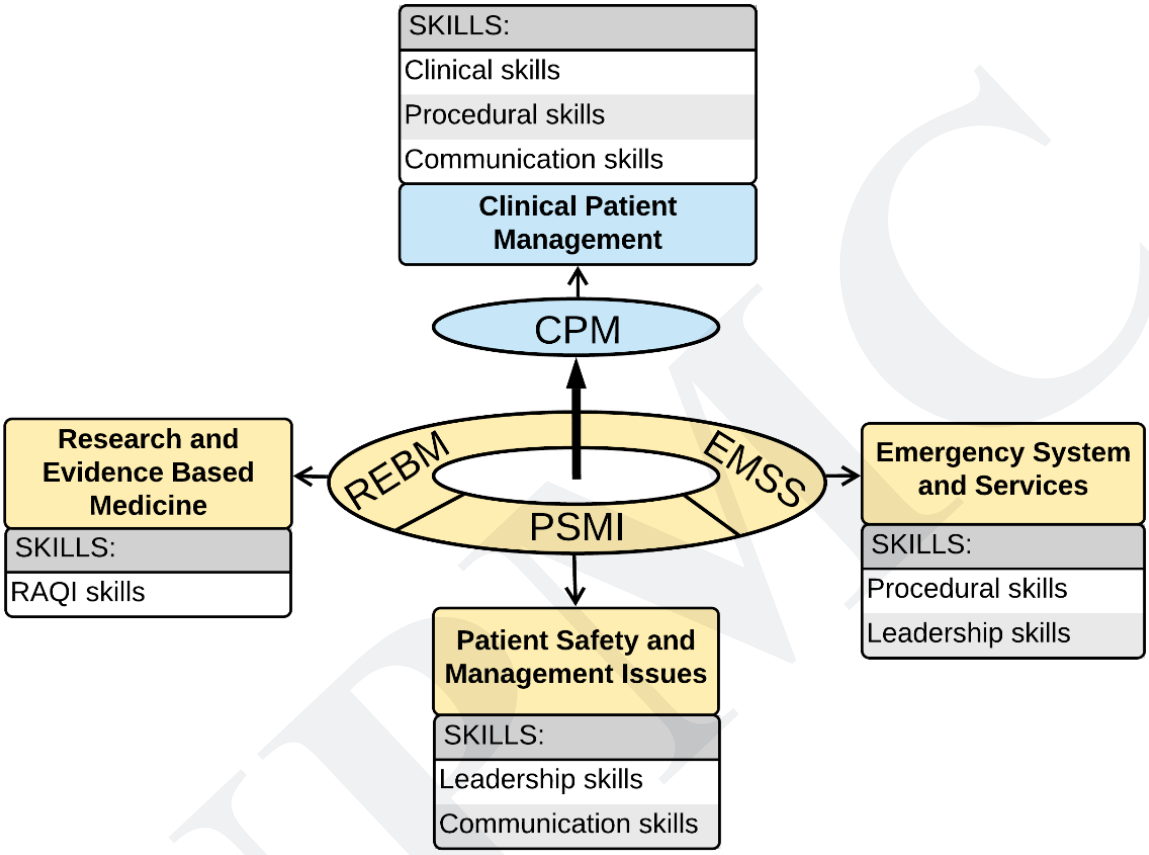


Figure 6: Skills syllabus.



5. Assessment Tool

Assessment is an essential part of training and reflects the clinical activities that the trainee will perform as an Emergency Medicine specialist. These include clinical activities relating to the care of individual patients, and non-clinical activities relating to administrative and organisational tasks, and academic skills.

Assessments described in this curriculum are aimed at:

1. ensuring that trainees acquire the necessary knowledge, skills and attitudes essential to Emergency Medicine practice.
2. providing guidance for both the trainer and the trainee about the trainee's ongoing learning needs, and to support the trainee's development of competencies.
3. informing the trainee of any gaps between their current knowledge and skills level and the expected level of performance to be achieved at a particular stage of their training.
4. providing the judgement of whether the trainee has reached the appropriate level of knowledge and skills and is ready to progress to the next stage.

Table 4 summarises the assessments in the postgraduate Emergency Medicine training.

Table 4: Summary of assessments

What is assessed:	Tools used to assess		Target stage:
Performance at the workplace	Workplace-based assessment (WPBA) tools:		Throughout training
	Master's Degree Programme:	MOH-FRCEM Programme:	
	Mini-CEX	Mini-CEX	
	CBD	CBD	
	IBA	DOPS	
	FMAT	ACAT-EM	
Procedural skills	Logbook of procedural skills		Throughout training
Successful completion of clinical training placements	Attendance record		Throughout training
	Supervisor/Trainer's report		End of every placement
Research/audit/quality improvement (RAQI) project activities	RAQI progress presentation		Stage 2-4/ST4-6: six monthly
	Supervisor's report		Stage 2-4/ST4-6: annually
	RAQI project report evaluation		Submitted in Stage 4/ST4-6
Exit Essential Learning Activities (Exit ELAs)	WPBA tools		Throughout training
	Logbook of procedural skills		Throughout training
Annual review of trainee's progress (Trainee Portfolio)	Supervisor's annual review report		Annually

What is assessed:	Tools used to assess	Target stage:
Knowledge and skills	Examinations:	
	Specialty Conjoint Examination in Emergency Medicine – Part I Examination	End of Stage I
	Specialty Conjoint Examination in Emergency Medicine – Final Examination	End of Stage 4
	FRCEM Intermediate	ST1-3
	MRCEM OSCE	ST1-3
	FRCEM Final	ST5-6

6. Appendices

Entry ELA-1

Activity	Performing focused history taking and clinical examination
Description	This ELA involves obtaining history and performing clinical examinations tailored to the emergent assessment and management of emergency department patients. This ELA includes gathering relevant clinical data in the presence of acute severe illness or life-threatening conditions where rapid but accurate and reliable patient assessment is crucial.

Knowledge (Know, facts, information)	**Skills** (Do, practical, psychomotor, techniques)	**Attitudes** (Feel, behaviours displaying underlying values or emotions)
Pertinent history elements in presenting complaints. Symptoms and signs that indicate unstable or life-threatening features. Differential diagnoses based on presenting symptoms and signs.	Clinical reasoning skills – gathers pertinent information targeted to the chief complaints and relevant to patient care. Clinical assessment skills – performs clinical examination in a logical sequence, elicits clinical signs and interprets them correctly. Communication skills – uses appropriate language, listens to patients appropriately, observes patient's verbal and non-verbal cues.	Be attentive and inquisitive to patient's narratives. Shows empathy and compassion. Shows respect for privacy, dignity and confidentiality. Shows sense of urgency in appropriate situation. Keeps calm under stress. Knows own limitations and asks for help in situations of clinical uncertainties.
Example Behaviours		
Positive (Things that should be done, correct techniques or practices, things a trainee might do right)	**Negative** (Things that should not be done, incorrect techniques or practices, things a trainee might do wrong)	**Negative passive** (Things that may be forgotten or omitted that constitute incorrect or substandard patient care, things a trainee might forget to do)
Prioritises and addresses key presenting issues of chief complaints. Modifies approach to clinical history taking and examination appropriately depending on the clinical condition. Revisits history and physical exam to address incomplete information. Initiates simultaneous basic critical interventions appropriately. Keeps patient appropriately covered during examination.	Obtains, records and presents inaccurate or irrelevant history or clinical findings.	Missing key information. Does not obtain collateral history where necessary. Fails to record or report relevant negative findings. Unaware of the patient deteriorating during data gathering.
Assessment/Evidence		
Logbook SPOT-EM interview		

Entry ELA-2

Activity	Recognition and initial management of patients with possible obstructed airway
Description	This ELA includes assessment of the airway, securing a patient airway using a stepwise approach and performing endotracheal intubation. The scope of this ELA is patients with uncomplicated airway obstruction who cannot maintain oxygenation and ventilation, and needing crash intubation, such as respiratory arrest, deep coma or near death.

Knowledge (Know, facts, information)	**Skills** (Do, practical, psychomotor, techniques)	**Attitudes** (Feel, behaviours displaying underlying values or emotions)
Upper airway anatomy. Symptoms and signs of airway obstruction. Causes of upper airway obstruction. Methods of maintaining a patent airway and the stepwise approach. Equipment used in airway management (airway adjuncts, suction device and endotracheal intubation). Indications for endotracheal intubation. Radiographic interpretation of endotracheal tube position.	Clinical assessment skills – assessment of airway patency. Procedural skills – positioning methods and manoeuvres to maintain airway patency, insertion of airway adjuncts, effective bag-mask ventilation, insertion of endotracheal tube using direct laryngoscopy, confirmation of endotracheal tube position, nasogastric tube insertion.	Shows respect, empathy and compassion. Shows sense of urgency in appropriate situation. Keeps calm under stress. Knows own limitations and asks for help in situations of clinical uncertainties.
Example Behaviours		
Positive (Things that should be done, correct techniques or practices, things a trainee might do right)	**Negative** (Things that should not be done, incorrect techniques or practices, things a trainee might do wrong)	**Negative passive** (Things that may be forgotten or omitted that constitute incorrect or substandard patient care, things a trainee might forget to do)
Promptly seeks help and places patients in the appropriate triage zone. Wears appropriate personal protective apparatus. Gentle handling of the patient throughout the procedure. Checks effectiveness of each intervention step. Regularly monitors vital signs.	Gives excessive ventilation. Causes significant injury to the oropharynx. Delays alerting colleagues and other staff.	Not assessing patient's conscious level. Not measuring the appropriate size of oropharyngeal or nasopharyngeal airway. Not documenting the procedure.
Assessment/Evidence		
Logbook SPOT-EM interview		

Entry ELA-3

Activity	Recognition and initial management of patients in respiratory distress or failure
Description	This ELA involves assessment of a patient presenting with breathing difficulties from any cause, the initial treatment to assist the work of breathing of the patient and the initial relevant investigations to assist with the diagnosis. The scope of this ELA with regards to specific disease management includes acute asthma, acute exacerbation of COPD, acute pulmonary oedema and severe pneumonia.

Knowledge (Know, facts, information)	**Skills** (Do, practical, psychomotor, techniques)	**Attitudes** (Feel, behaviours displaying underlying values or emotions)
Symptoms and signs of respiratory distress and respiratory failure. Differential diagnosis for respiratory distress and respiratory failure. Differentiation between type I and type II respiratory failures. Selection and indication of oxygen therapy and oxygen delivery devices. Selection and interpretation of bedside tests, laboratory tests and imaging studies to determine the cause of the respiratory distress or respiratory failure. Drugs used in treatment for common core respiratory disorders.	Clinical assessment skills – assessment of symptoms and signs of respiratory distress and failure Procedural skills – application of oxygen delivery devices, bag-mask ventilation, application of non-invasive ventilation (CPAP and BIPAP), arterial puncture for arterial blood gas analysis.	Shows respect, empathy and compassion. Shows sense of urgency in appropriate situation. Keeps calm under stress. Knows own limitations and asks for help in situations of clinical uncertainties.
Example Behaviours		
Positive (Things that should be done, correct techniques or practices, things a trainee might do right)	**Negative** (Things that should not be done, incorrect techniques or practices, things a trainee might do wrong)	**Negative passive** (Things that may be forgotten or omitted that constitute incorrect or substandard patient care, things a trainee might forget to do)
Promptly seeks help and places patients in the appropriate triage zone. Regularly monitors vital signs. Continuously monitors for patient's response to treatment.	Gives inappropriate method or dose of oxygen therapy. Delays alerting colleagues and other staff.	Not assessing patient's conscious level. Fails to consider non-pulmonary causes of respiratory distress or failure.
Assessment/Evidence		
Logbook SPOT-EM interview		

Entry ELA-4

Activity	Recognition and initial management of patients with hypotension and shock
Description	The scope of this ELA includes patients in septic shock, hypovolaemic shock and dengue shock syndrome. This ELA involves assessment of the patient, ordering and interpreting bedside, laboratory and radiological investigations, and initial resuscitation to restore perfusion.

Knowledge (Know, facts, information)	**Skills** (Do, practical, psychomotor, techniques)	**Attitudes** (Feel, behaviours displaying underlying values or emotions)
Early and late symptoms and signs of shock. Identification of shock type and severity of the condition (compensated versus hypotensive shock). Types and indications of intravenous fluids, blood transfusion, inotropes and vasopressors. Selection and interpretation of bedside tests, laboratory tests and imaging studies to investigate the diagnosis.	Clinical assessment skills – assessment of patient to recognise shock and identify type of shock. Therapeutic skills – infusion of intravenous fluid resuscitation and blood transfusion, direct compression of bleeding wounds. Procedural skills – insertion of appropriate size and site for intravenous cannulation.	Shows respect, empathy and compassion. Shows sense of urgency in appropriate situation. Keeps calm under stress. Knows own limitations and asks for help in situations of clinical uncertainties.
Example Behaviours		
Positive (Things that should be done, correct techniques or practices, things a trainee might do right)	**Negative** (Things that should not be done, incorrect techniques or practices, things a trainee might do wrong)	**Negative passive** (Things that may be forgotten or omitted that constitute incorrect or substandard patient care, things a trainee might forget to do)
Promptly seeks help and places patients in the appropriate triage zone. Regularly monitors vital signs and patient's response to treatment. Practices guided fluids and drugs therapy. Practices standard precautions for infection control and prevention.	Gives inappropriate method or dose of intravenous fluid therapy or blood transfusion. Delays alerting colleagues and other staff.	Not assessing airway, ventilation and mental status complications of shock. Fails to recognise early or compensated shock.
Assessment/Evidence		
Logbook SPOT-EM interview		

Entry ELA-5

Activity	Recognition and initial management of patients with ST-elevation myocardial infarction
Description	This ELA involves making a prompt diagnosis of ST-elevation myocardial infarction (STEMI) in a patient presenting with chest pain. This ELA includes assessment of the patient, interpretation of ECG, and preparation for urgent treatment of patient.

Knowledge (Know, facts, information)	**Skills** (Do, practical, psychomotor, techniques)	**Attitudes** (Feel, behaviours displaying underlying values or emotions)
Criteria for diagnosis of STEMI. Interpretation of STEMI ECG pattern. Differential diagnoses including MI mimics. Drugs used in the treatment of STEMI. Complications of STEMI. Indications, contraindications and complications of thrombolytic therapy.	Clinical assessment skills – assessment of cardiovascular status including symptoms and signs of heart failure, arrhythmia and cardiogenic shock. Communication skills – explains diagnosis and treatment to patient/ relatives in ways that patient/ relative can understand. Clinical skills – preparation of resuscitation drugs and equipment to anticipate potential complications, cardiopulmonary resuscitation, defibrillation.	Shows respect, empathy and compassion. Shows sense of urgency in appropriate situation. Keeps calm under stress. Knows own limitations and asks for help in situations of clinical uncertainties.
Example Behaviours		
Positive (Things that should be done, correct techniques or practices, things a trainee might do right)	**Negative** (Things that should not be done, incorrect techniques or practices, things a trainee might do wrong)	**Negative passive** (Things that may be forgotten or omitted that constitute incorrect or substandard patient care, things a trainee might forget to do)
Promptly seeks help and places patients in the appropriate triage zone. Regularly monitors vital signs. Adheres to guideline for door-to-needle or door-to-balloon time. Uses thrombolysis checklist.	Gives inappropriate oxygen therapy. Delays alerting colleagues and other staff.	Not performing right-sided and posterior ECG in inferior STEMI. Fails to consider other differentials or MI mimics. Fails to ensure adequate pain control.
Assessment/Evidence		
Logbook SPOT-EM interview		

Entry ELA-6

Activity	Obtaining informed consent for procedures
Description	This ELA includes informed consent for common emergency procedures in the emergency department (for example: blood transfusion, wound suturing, thoracocentesis, chest tube insertion, thrombolysis for STEMI). This ELA should not be carried out for procedures that the trainees do not know the indications, contraindications, alternatives, risks and benefits.

Knowledge (Know, facts, information)	**Skills** (Do, practical, psychomotor, techniques)	**Attitudes** (Feel, behaviours displaying underlying values or emotions)
Types of consent. Criteria for a valid consent. Methods and techniques involved in the procedure or treatment. Indications, contraindications and risk of complications. Sequelae and alternatives if not having the procedure or treatment.	Communication skills – explains the reasons and details regarding the procedure or treatment in ways that patient can understand, identifies and overcomes possible barriers to effective communication, assesses patient's understanding.	Shows empathy, honesty and compassion. Open-minded towards patient's ideas, cultural beliefs or religious standing.
Example Behaviours		
Positive (Things that should be done, correct techniques or practices, things a trainee might do right)	**Negative** (Things that should not be done, incorrect techniques or practices, things a trainee might do wrong)	**Negative passive** (Things that may be forgotten or omitted that constitute incorrect or substandard patient care, things a trainee might forget to do)
Checks and adheres to local policy and protocols for consent documentation. Checks that the information given is fully understood. Gives opportunity for the patient to ask questions. Answers all questions appropriately. Draws diagrams to aid understanding of the explanation regarding the procedure.	Poor documentation of the conversation and the decision. Threatens the patient or family members. Rushes patient into giving the consent. Oversimplifies the procedure. Uses medical jargons.	No witness to the conversation. Fails to obtain a translator resulting in misinterpretation of information in situation of language barrier. Fails to recognise misinterpretation of information.
Assessment/Evidence		
Logbook SPOT-EM interview		

Glossary of terms

ACLS	Advanced Cardiovascular Life Support
ALS	Advanced life Support
APC	Annual Practicing Certificate
ARCP	Annual Review of Competence Progression
ATLS	Advanced Trauma Life Support
BPL	Bahagian Pengurusan Latihan (Training Management Division)
BPP	Bahagian Pembangunan Perubatan (Medical Development Division)
CBD	Case-Based Discussion
CBRNE	Chemical Biological Radiological Nuclear Explosives
CEP	College of Emergency Physicians
DOPS	Direct Observation of Procedural Skills
IBA	Intervention Based Assessment
IELTS	International English Language Testing System
ELA	Essential Learning Activities
EPR	Examination for Provisional Registration
EM	Emergency Medicine
FMAT	Floor Management Assessment Tool
FRCEM	Fellowship of the Royal College of Emergency Medicine
KFQ	Key Feature Questions
MCQ	Multiple Choice Questions
MedEx	Medical Specialist Pre-Entrance Examination
Mini-CEX	Mini-Clinical Evaluation Exercise
MMC	Malaysian Medical Council
MOD	Ministry of Defence
MOE	Ministry of Education
MOH	Ministry of Health
MTLS	Malaysian Trauma Life Support
MRCEM	Membership of the Royal College of Emergency Medicine
MUET	Malaysian University English Test
OET	Occupational English Test
OSCE	Objective Structured Clinical Examination
PGMSS	Postgraduate Medical Specialist and Subspecialisation
QIP	Quality Improvement Project
SAQ	Short Answer Questions
SJP	Situational Judgement Paper
SPOT-EM	Selection for Postgraduate Training - Emergency Medicine
ST	Specialty Training
UNIMAS	Universiti Malaysia Sarawak

USM	Universiti Sains Malaysia
SCCEM	Specialty Conjoint Committee for Emergency Medicine
TOEFL	Test of English as a Foreign Language
TPC	Temporary Practicing Certificate
UITM	Universiti Teknologi MARA
UK	United Kingdom
UKM	Universiti Kebangsaan Malaysia
UM	Universiti Malaya
WPBA	Workplace-based assessment

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