

# Emergency Medicine Certificate

Curriculum Document

## TABLE OF CONTENTS

<b>Purpose and Background .....</b>	<b>3</b>
Target group .....	3
<b>Course Information .....</b>	<b>3</b>
Introduction .....	3
Name of qualification/s .....	3
Nominal Duration .....	3
Approved Emergency Department .....	3
Qualification Levels .....	3
Course structure .....	4
Assessment .....	4
Entry Requirements .....	4
Equivalence .....	5
Teaching and learning methods .....	5
Supervision .....	5
Evaluation .....	5
<b>Emergency Medicine Competencies .....</b>	<b>6</b>
Medical Expert .....	6
Communicator .....	6
Collaborator .....	6
Manager .....	6
Health Advocate .....	6
Scholar .....	6
Professional .....	6
<b>Emergency Medicine Certificate .....</b>	<b>7</b>
Core Units .....	7
Workshops .....	7
<b>CORE UNITS .....</b>	<b>8</b>
EMC01     Undertake initial assessment and management .....	8
EMC02     Manage common emergency presentations .....	11
EMC03     Participate in clinical support activities and administration .....	17
<b>Appendix 1   Assessment program for the Emergency Medicine Certificate .....</b>	<b>19</b>
Introduction .....	19
Assessment Model .....	19
Educational Theory .....	19
Miller’s Pyramid .....	20
Workplace based Assessment .....	20
Blueprinting .....	20
Assessment Summary .....	21
Emergency Medicine Certificate .....	21
<b>Procedural Checklist (EMC) .....</b>	<b>22</b>
Description of the Assessment Methods .....	24
Mini-CEX .....	24
Case-based discussion .....	24
e-Portfolio .....	24
Online Assessment .....	24
DOPS .....	24
Glossary .....	24
References .....	25

## Purpose and Background

Emergency Medicine is concerned with the management of the broad spectrum of acute illnesses and injury in all age groups. The aim of this curriculum is to identify the competencies considered essential for a non-specialist doctor working in Emergency Medicine settings within Australasia. The scope of practice for those achieving Certificate and/or Diploma level qualifications will vary according to the location of practice.

### Target group

This curriculum is aimed at Career Medical Officers, Junior Medical Officers, rural GPs and those doctors interested in working in Emergency Medicine.

## Course Information

### Introduction

This curriculum sets out the intended aims and objectives, content, experiences and outcomes, processes and evaluation of the educational programme intended to provide non-specialist practitioners of emergency medicine with adequate knowledge and sufficient clinical experience to be safe, efficient practitioners in emergency departments.

### Name of qualification/s

Emergency Medicine Certificate  
Emergency Medicine Diploma

### Nominal Duration

Six months – Emergency Medicine Certificate  
18 months – Emergency Medicine Diploma

The Emergency Medicine certificate requires participants to complete at least six months of supervised clinical practice in an approved emergency department. This practice is to be supervised by a FACEM or other appropriately qualified medical practitioner approved by the College.

The Emergency Medicine Diploma requires participants to undergo a further 12 months supervised training in an approved emergency department under FACEM (or other approved doctor) supervision. This would be in addition to *either* three months in anaesthetics and three months in ICU, *or* six months in anaesthetics.

### Approved Emergency Department

The emergency department requires a minimum of one (1) FTE FACEM who will be the nominated ACEM appointed supervisor. Each FACEM within the emergency department should ideally be provided with at least 25% non-clinical time for approved teaching, research or administrative activities. A minimum of 30% of candidate time should be under the direct clinical supervision of a FACEM.

It is envisaged that in the future, with further development of the ACEM non-specialist training pathways, practitioners who have completed the Emergency Medicine Diploma and appropriate training as a supervisor will satisfy the staffing requirements for an emergency department to be approved for non-specialist training.

### Qualification Levels

The Emergency Medicine Certificate will provide participants with a broad range of knowledge and skills to meet the demands of basic emergency medicine practice in contemporary health care facilities.

The Emergency Medicine Diploma will provide participants with a broad and complex range of knowledge and skills to meet the responsibilities of more advanced emergency medicine practice. The Emergency Medicine Diploma will build on skills gained in the Certificate and provide more advanced knowledge in the areas of leadership, management and the clinical practice of emergency medicine.

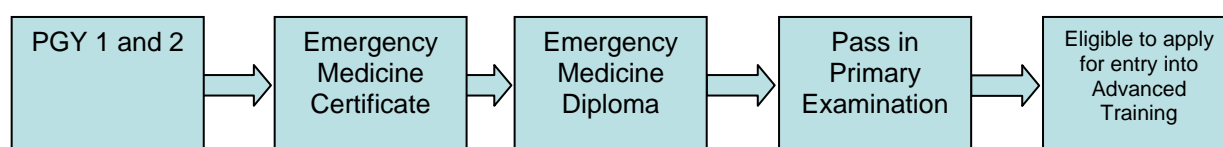
***(Note: Completion of the Fellowship of Emergency Medicine provides a comprehensive range of knowledge and skills required to meet the demands of independent practice as a Specialist Emergency Physician.)***

### Course structure

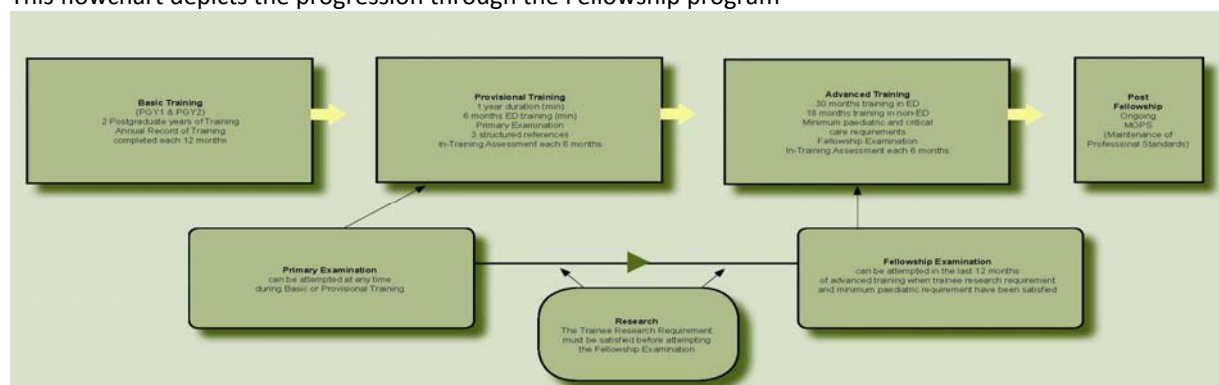
To be awarded the Emergency Medicine Certificate, participants must successfully complete the three core units and one compulsory workshop as specified in the course structure and undertake *at least* six months supervised practice in an approved emergency department. Candidates must also become certified in Basic Life Support (BLS) and Advanced Life Support (ALS).

To be awarded the Emergency Medicine Diploma, participants must have successfully completed the Emergency Medicine Certificate and complete the three core and one elective unit as specified in the course structure. Participants must also complete a further twelve months supervised practice in an approved emergency department *in addition to either* three months in anaesthetics and three months in ICU, *or* six months in anaesthetics (total of eighteen months.) Those wishing to undertake the Diploma must be BLS and ALS certified.

This flowchart depicts the progression through the course/s and recognition of prior learning for those wishing to participate in the Fellowship program.



This flowchart depicts the progression through the Fellowship program



### Assessment

It is intended that the curriculum identify the knowledge, skills and expertise that participants are required to demonstrate. It also identifies the means by which feedback should be given and assessment undertaken.

Participants will be assessed using both formative and summative methods. Workplace-based assessment methods will be used to assess clinical skills and applied knowledge. Written and verbal assessments will be used to identify participants' theoretical knowledge.

Formative assessment methods are designed to provide participants with effective, timely and useful feedback in order to identify areas of strength and those areas requiring further development. Formative assessment provides the opportunity to enhance and improve non-clinical as well as clinical skills

Appendix 1 includes further detail regarding the specific assessment methodology to be used within this learning program.

### Entry Requirements

Those wishing to enrol into the Emergency Medicine Certificate will be required to have successfully completed at least PGY2.

**Equivalence**

The satisfactory completion of the RACGP Advanced Rural Skills Program will be considered equivalent to the Emergency Medicine Certificate.

Satisfactory completion of the Emergency Medicine Diploma and a pass in the Primary examination would be equivalent to the completion of Provisional Training and hence the applicant would be eligible to apply for entry into Advanced Emergency Medicine Training as per ACEM guidelines.

**Teaching and learning methods**

Participants within the Emergency Medicine Certificate and Diploma will experience a mixed modality of teaching and learning methods. The majority of learning will be workplace-based with the addition of online learning modules.

Participants are also required to attend at least two externally-run workshops (ELS and either APLS or EMST).

Participants within both the Emergency Medicine Certificate and Diploma will be required to keep an e-portfolio recording their attendance at workshops, scanned documentation, formative feedback, assessment results, procedural checklist and reflective journal. This learning program is designed to be self-directed with the inclusion of online quizzes to enable self-assessment of knowledge and identification of areas requiring further development.

The curriculum addresses both technical (clinical) and non-technical (professional) skills and these are considered equally important within this learning program.

**Supervision**

Participants will be supervised by an accredited FACEM working in the same organisation who can assist with the clinical aspects of practice. Participants are required to establish and maintain a learning plan with their supervisor which will be reviewed on a regular basis. Supervisors will be required to attend a workshop to support and enhance the facilitation of the training program. Candidates are required to ensure there is a qualified supervisor available in their workplace before registering with the program.

**Evaluation**

An interim non-specialist working party which reports directly to the ACEM Council will be responsible for continuous review of the curriculum and will receive feedback from the trainers and candidates and from the supervisors. The Council through the working party will be responsible for continuously monitoring this feedback and will ensure that quality of the program is maintained through improvement and modification strategies.

## Emergency Medicine Competencies

Each of the units included within the curriculum is aligned to one or more of the emergency medicine competencies described within the CanMEDS framework.<sup>1</sup> The complete description of the competencies can be accessed at <http://rcpsc.medical.org/canmeds/>

These competencies describe the key skills and knowledge of any medical specialty and provide learners with a blueprint to help develop mastery of the discipline of emergency medicine.

### **Medical Expert**

#### **Definition**

As *Medical Experts*, Emergency Practitioners integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills and professional attitudes in their provision of patient-centred care. Medical Expert is the central physician Role in the CanMEDS framework.

### **Communicator**

#### **Definition**

As *Communicators*, Emergency Practitioners effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during and after the medical encounter.

### **Collaborator**

#### **Definition**

As *Collaborators*, Emergency Practitioners effectively work within a health care team to achieve optimal patient care.

### **Manager**

#### **Definition**

As *Managers*, Emergency Practitioners are integral participants in health care organisations, organising sustainable practices, making decisions about allocating resources, and contributing the effectiveness of the health care system.

### **Health Advocate**

#### **Definition**

As *Health Advocates*, Emergency Practitioners responsibly use their expertise and influence to advance the health and well-being of individual patients, communities and populations.

### **Scholar**

#### **Definition**

As *Scholars*, Emergency Practitioners demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

### **Professional**

#### **Definition**

As *Professionals*, Emergency Practitioners are committed to the health and well-being of individuals and society through ethical practice, professional-led regulation and high personal standards of behaviour.

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## Emergency Medicine Certificate

Unit	Title	Pre-requisite	Training	Assessment
<b>Core Units</b>				
complete the three (3) core units.				
EMC01 (Aligned to: Medical Expert Collaborator Communicator Professional)	Undertake initial assessment and management	PGY2	Workplace Online Workshop	Mini-CEX CBD Exam Procedural checklist ELS Workshop DOPS
EMC02 (Aligned to Medical Expert Communicator Collaborator Professional)	Manage common emergency presentations	PGY2	Workplace Online Workshop	Mini-CEX CBD Exam Procedural checklist ELS Workshop DOPS
EMC03 (Aligned to Communicator Collaborator Professional)	Participate in clinical support activities and administration	PGY2	Workplace Online Workshop	Mini-CEX CBD Exam e-portfolio
<b>Workshops</b>				
<b>Participants are also required to complete the following workshop:</b>				
ELS	Emergency Life Support	nil	Workshop	Evidence of satisfactory completion

## CORE UNITS

## EMC01 Undertake initial assessment and management

Element	Knowledge	Skills/Procedures
Utilise the <i>emergency medicine approach</i> to the undifferentiated patient to <i>prioritise tasks</i> using effective <i>history taking and examination techniques</i> .	<ul style="list-style-type: none"> <li>• Identify those patients who are: <ul style="list-style-type: none"> <li>➢ Unstable with the immediate need of resuscitation</li> <li>➢ Potentially unstable requiring emergent recognition and intervention</li> <li>➢ Physiologically stable but undiagnosed</li> </ul> </li> <li>• Recognise critical symptoms and symptom patterns.</li> <li>• Apply knowledge of symptomatology to determine the likely differential diagnosis.</li> <li>• Demonstrate systematic assessment of undifferentiated presentations – chest pain, shortness of breath, abdominal pain, altered level of consciousness.</li> <li>• Demonstrate awareness of the influence of age, gender and sociocultural factors.</li> <li>• Identify and order investigations as appropriate.</li> <li>• Recognise and identify <b>danger signs</b> (<i>i.e. red flags</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• Elicit a relevant focused history and identify and synthesise problems</li> <li>• Derive a plan for initial management, investigation, treatment and disposition.</li> </ul>
Assess, establish and maintain a <i>patent airway</i> .	<ul style="list-style-type: none"> <li>• Identify the obstructed airway optimising the patient's position for airway management.</li> <li>• Identify and commence appropriate treatment for: <ul style="list-style-type: none"> <li>➢ Complete obstruction</li> <li>➢ Partial obstruction</li> <li>➢ Conscious patient (adults and children)</li> <li>➢ Unconscious patient</li> </ul> </li> <li>• Complete the stabilisation sequence</li> <li>• Recognise when further assistance is required.</li> <li>• Carry out cervical spine protection as part of airway assessment.</li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>: <ul style="list-style-type: none"> <li>➢ Simple airway manoeuvres</li> <li>➢ Suction</li> <li>➢ Insertion Oral, NP airways</li> <li>➢ Insertion of LMA</li> <li>➢ In-line C-spine immobilisation</li> <li>➢ Application of hard cervical collar</li> </ul> </li> </ul>
Assess and treat patients presenting with <i>breathing difficulties</i> .	<ul style="list-style-type: none"> <li>• Recognise acute life threats to breathing and institute emergency treatment including non-invasive ventilation.</li> <li>• Recognise the need for urgent investigation (ECG, CXR, arterial blood gas analysis) and treatment</li> <li>• Undertake assessment of adequacy of ventilation both RR and effort</li> <li>• Measure SpO<sub>2</sub></li> <li>• Interpret blood gases</li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>: <ul style="list-style-type: none"> <li>➢ Auscultation of chest</li> <li>➢ BVM ventilation</li> <li>➢ Oxygen therapy</li> <li>➢ Pulse oximetry</li> </ul> </li> </ul>
Assess and treat patients presenting with <i>circulation</i>	<ul style="list-style-type: none"> <li>• Undertake assessment of the adequacy of circulation and interpret PR, BP including</li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>:</li> </ul>

Element	Knowledge	Skills/Procedures
<i>difficulties.</i>	<ul style="list-style-type: none"> <li>postural drop</li> <li>• Recognise cardiovascular compromise especially the physiological mechanisms of compensation and the state of adequate cardiac output</li> <li>• Identify and manage shock including:               <ul style="list-style-type: none"> <li>➢ hypovolaemic</li> <li>➢ cardiogenic</li> <li>➢ distributive</li> <li>➢ obstructive</li> </ul> </li> <li>• Demonstrate an awareness of the principles of fluid resuscitation</li> <li>• Identify common arrhythmias including management of life-threatening arrhythmias</li> <li>• Recognise the need for coronary reperfusion therapy</li> </ul>	<ul style="list-style-type: none"> <li>➢ IV access including large bore resuscitation lines</li> <li>➢ Safe defibrillation</li> </ul>
Assess and treat patients presenting with <i>seizure or altered level of consciousness</i>	<ul style="list-style-type: none"> <li>• Recognise the need for airway protection</li> <li>• Measure BSL in order to identify the presence or absence of hypoglycaemia</li> <li>• Measure Glasgow Coma Score</li> <li>• Undertake assessment of pupillary reactions</li> <li>• Identify localising neurological signs</li> <li>• Demonstrate knowledge of the principles of seizure management including appropriate pharmacology</li> <li>• Demonstrate knowledge of the physical care of the unconscious patient</li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>:           <ul style="list-style-type: none"> <li>➢ Simple airway opening manoeuvres</li> <li>➢ IV/IO access</li> <li>➢ Positioning of the unconscious patient</li> <li>➢ Insertion of gastric tube</li> <li>➢ Insertion of IDC</li> </ul> </li> </ul>
Safely and effectively <i>relieve pain</i> in a timely manner	<ul style="list-style-type: none"> <li>• Recognise the most appropriate method of pain relief for each presentation.</li> <li>• Demonstrate knowledge of the various types of analgesia including:           <ul style="list-style-type: none"> <li>➢ Oral</li> <li>➢ Parenteral</li> <li>➢ Local</li> <li>➢ Inhalation</li> <li>➢ Directed therapy including paediatric-specific techniques</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>:           <ul style="list-style-type: none"> <li>➢ IV access</li> <li>➢ Digital block</li> <li>➢ Splinting</li> </ul> </li> </ul>
Recognise, assess and treat patients who have suffered <i>trauma</i>	<ul style="list-style-type: none"> <li>• Obtain pre-hospital information using MIST method</li> <li>• Demonstrate knowledge of ABCD approach to trauma</li> <li>• Recognise patterns of trauma, utilising primary and secondary surveys</li> <li>• Identify and treat life and limb threatening injury</li> <li>• Demonstrate an understanding of appropriate resource mobilisation and referral</li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>:           <ul style="list-style-type: none"> <li>➢ Cervical spine immobilisation</li> <li>➢ Appropriate simple airway techniques</li> <li>➢ Decompression of tension pneumothorax</li> <li>➢ Large bore IV access</li> <li>➢ Appropriate fluid resuscitation</li> <li>➢ Splinting of pelvic and long bone fractures</li> <li>➢ Insertion of urinary catheter</li> <li>➢ Insertion of oro/naso-gastric catheter</li> </ul> </li> </ul>
Undertake assessment of patient's <i>psychiatric</i> state	<ul style="list-style-type: none"> <li>• Identify those who are alcohol and drug / substance dependent</li> </ul>	<ul style="list-style-type: none"> <li>• Prescribe and/or provide appropriate restraint including</li> </ul>

Element	Knowledge	Skills/Procedures
including but not limited to: <ul style="list-style-type: none"><li>• Likelihood of self-harm</li><li>• Depression</li><li>• Anxiety disorders</li><li>• Acute psychoses</li><li>• Behavioural emergencies</li></ul>	<ul style="list-style-type: none"><li>• Identify appropriate treatment which may include referral.</li><li>• Undertake assessment of suicide risk and liaise with appropriate psychiatric services</li><li>• Discuss the relevant legislation in relation to the mental health act.</li></ul>	verbal, physical and pharmacological for the acutely agitated patient. <ul style="list-style-type: none"><li>• Undertake appropriate responsibilities in accordance with the Mental Health Act</li></ul>

**EMC02 Manage common emergency presentations**

Element	Knowledge	Skills/Procedures
Undertake history, examination, investigation and initiate treatment of patients presenting with <i>altered level of consciousness/confusion</i> .	<ul style="list-style-type: none"> <li>• Identify the <b>underlying cause</b> of altered level of consciousness/confusion including the distinguishing features of: <ul style="list-style-type: none"> <li>➤ Neurological</li> <li>➤ Sepsis/shock</li> <li>➤ Electrolyte/metabolic abnormalities including hypoglycaemia</li> <li>➤ Poisoning</li> </ul> </li> <li>• Identify, order and interpret the most appropriate <b>investigation</b> and provide appropriate <b>treatment</b> including: <ul style="list-style-type: none"> <li>➤ Fluid/electrolyte therapy</li> <li>➤ Airway management</li> <li>➤ Antibiotics</li> <li>➤ Other specific therapies</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>: <ul style="list-style-type: none"> <li>➤ Basic airway manoeuvres</li> <li>➤ Venous cannulation</li> <li>➤ BSL</li> <li>➤ Lumbar puncture</li> </ul> </li> </ul>
Undertake history, examination, investigation and initiate treatment of patients presenting with <i>chest pain</i> .	<ul style="list-style-type: none"> <li>• Identify the <b>underlying cause</b> of chest pain including the distinguishing features of: <ul style="list-style-type: none"> <li>➤ ACS (including STEMI, non-STEMI and unstable angina)</li> <li>➤ Pulmonary embolus</li> <li>➤ Pleuritis</li> <li>➤ Pneumonia</li> <li>➤ Pericarditis</li> <li>➤ Aortic dissection</li> </ul> </li> <li>• Identify the most appropriate <b>investigation/s</b> for the presentation.</li> <li>• Provide appropriate <b>treatment</b> including appropriate analgesia.</li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>: <ul style="list-style-type: none"> <li>➤ Venous cannulation</li> <li>➤ Arterial puncture</li> <li>➤ ECG analysis</li> <li>➤ Chest x-ray interpretation</li> </ul> </li> </ul>
Undertake history, examination, investigation and initiate treatment of patients presenting with <i>dyspnoea</i>	<ul style="list-style-type: none"> <li>• Identify the <b>underlying cause</b> of dyspnoea including the distinguishing features of: <ul style="list-style-type: none"> <li>➤ COPD/Asthma</li> <li>➤ Pneumonia</li> <li>➤ Pulmonary oedema</li> <li>➤ Pulmonary embolus</li> <li>➤ Pneumothorax</li> <li>➤ Bronchiolitis</li> <li>➤ Metabolic causes</li> </ul> </li> <li>• Identify, order and interpret the most appropriate <b>investigation</b> and provide appropriate <b>treatment</b> including: <ul style="list-style-type: none"> <li>➤ Oxygen therapy</li> <li>➤ Non-invasive ventilation</li> <li>➤ Bronchodilators</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>: <ul style="list-style-type: none"> <li>➤ Venous cannulation</li> <li>➤ Arterial puncture</li> <li>➤ Needle thoracentesis</li> <li>➤ Intercostal catheter</li> </ul> </li> </ul>
Undertake history, examination, investigation and initiate treatment of patients presenting with <i>collapse/syncope</i>	<ul style="list-style-type: none"> <li>• Identify the <b>underlying causes</b> of collapse/syncope including the distinguishing features of: <ul style="list-style-type: none"> <li>➤ Seizure</li> <li>➤ Hypoglycaemia</li> <li>➤ Arrhythmia</li> <li>➤ Hypovolaemia</li> <li>➤ Cardiac arrest</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>: <ul style="list-style-type: none"> <li>➤ Venous cannulation</li> <li>➤ Basic life support</li> <li>➤ Defibrillation</li> <li>➤ Advanced life support</li> <li>➤ BSL measurement</li> </ul> </li> </ul>

Element	Knowledge	Skills/Procedures
	<ul style="list-style-type: none"> <li>• Demonstrate knowledge of the following <b>danger signs</b>:               <ul style="list-style-type: none"> <li>➤ Chest pain</li> <li>➤ Shortness of breath</li> <li>➤ Abnormal ECG</li> <li>➤ Hb low</li> <li>➤ Systemic hypotension</li> </ul> </li> <li>• Identify, order and interpret the most appropriate <b>investigations</b> and provide appropriate <b>treatment</b> including               <ul style="list-style-type: none"> <li>➤ IV Glucose</li> <li>➤ IV fluids</li> <li>➤ Acute seizure management</li> </ul> </li> </ul>	
<p><b>Paediatric</b> Undertake history, examination, investigation and initiate treatment of the <i>febrile child</i></p>	<ul style="list-style-type: none"> <li>• Identify the <b>underlying cause</b> of fever including the distinguishing features of:               <ul style="list-style-type: none"> <li>➤ Upper respiratory tract infection</li> <li>➤ Infection of the ear, nose , throat</li> <li>➤ Lower respiratory tract infection</li> <li>➤ Urinary tract infection</li> <li>➤ Meningitis</li> <li>➤ Orthopaedic causes including septic arthritis, osteomyelitis</li> <li>➤ Bacteraemia</li> <li>➤ Severe sepsis</li> </ul> </li> <li>• Identify, order and interpret the most appropriate <b>investigations</b> and provide appropriate <b>treatment</b> including               <ul style="list-style-type: none"> <li>➤ IV Fluids</li> <li>➤ Anti-pyretics</li> <li>➤ Antibiotics</li> </ul> </li> <li>• Demonstrate knowledge of the following <b>danger signs</b>:               <ul style="list-style-type: none"> <li>➤ Limping or non weight-bearing child</li> <li>➤ Severe muscle pain</li> <li>➤ Floppy, listless child</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>:               <ul style="list-style-type: none"> <li>➤ Examination of the ear, nose and throat</li> <li>➤ Venous cannulation</li> <li>➤ Intraosseous access</li> <li>➤ Calculate fluid therapy requirements</li> <li>➤ Clean catch urine</li> <li>➤ Urethral catheter</li> <li>➤ Lumbar puncture</li> </ul> </li> </ul>
<p>Undertake history, examination, investigation and initiate treatment of children presenting with <i>breathing difficulty</i>.</p>	<p>Identify the <b>underlying cause</b> of paediatric respiratory difficulty including the distinguishing feature of:</p> <ul style="list-style-type: none"> <li>➤ Bronchiolitis</li> <li>➤ Croup</li> <li>➤ Pneumonia</li> <li>➤ Asthma</li> <li>➤ Metabolic</li> <li>➤ Foreign body</li> </ul> <ul style="list-style-type: none"> <li>• Identify, order and interpret the most appropriate <b>investigations</b> and provide appropriate <b>treatment</b> including:               <ul style="list-style-type: none"> <li>➤ Oxygen therapy</li> <li>➤ Adrenaline nebuliser</li> <li>➤ Bronchodilators</li> <li>➤ Steroids</li> </ul> </li> <li>• Demonstrate knowledge of the following <b>danger signs</b>:               <ul style="list-style-type: none"> <li>➤ Apnoea in infant</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>:               <ul style="list-style-type: none"> <li>➤ Measure SpO2</li> <li>➤ Apply oxygen</li> <li>➤ Administer nebuliser</li> <li>➤ Administer and teach use of spacer</li> <li>➤ Interpret chest x-ray</li> </ul> </li> </ul>

Element	Knowledge	Skills/Procedures
Undertake history, examination, investigation and initiate treatment of children presenting with <i>paediatric trauma</i>	<ul style="list-style-type: none"> <li>• Obtain pre-hospital information using MIST method</li> <li>• Demonstrate knowledge of ABCD approach to trauma</li> <li>• Recognise patterns of trauma, utilising primary and secondary surveys</li> <li>• Identify and treat life and limb threatening injury</li> <li>• Demonstrate an understanding of appropriate resource mobilisation and referral</li> <li>• Identify multi-trauma and orthopaedic trauma</li> <li>• Identify children at risk and take steps as appropriate.</li> <li>• Identify the signs of non-accidental injury.</li> <li>• Demonstrate knowledge of the relevant legislation relating to children at risk including the Child Protection Act.</li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>: <ul style="list-style-type: none"> <li>➢ Appropriate simple airway techniques</li> <li>➢ Cervical spine immobilisation</li> <li>➢ IV access and fluid resuscitation</li> <li>➢ Application of splinting</li> <li>➢ Application of appropriate analgesia</li> </ul> </li> </ul>
Undertake history, examination, investigation and initiate treatment of children presenting with <i>vomiting</i>	<ul style="list-style-type: none"> <li>• Identify the <b>underlying cause</b> of paediatric vomiting including the distinguishing features of: <ul style="list-style-type: none"> <li>➢ Gastroenteritis</li> <li>➢ Pyloric stenosis</li> <li>➢ UTI</li> <li>➢ Appendicitis</li> <li>➢ Other infections including meningitis</li> <li>➢ DKA</li> </ul> </li> <li>• Identify <i>when it is necessary</i> to investigate and provide appropriate <b>treatment</b> including: <ul style="list-style-type: none"> <li>➢ UEC</li> <li>➢ MSU</li> <li>➢ Glucose</li> <li>➢ Rehydration including oral, NG or IV as appropriate</li> <li>➢ Specific treatment for underlying causes</li> </ul> </li> <li>• Demonstrate knowledge of the following <b>danger signs</b>: <ul style="list-style-type: none"> <li>➢ Severe abdominal pain</li> <li>➢ Signs of shock or other symptoms of severe dehydration</li> <li>➢ Bile stained vomiting</li> <li>➢ Headache</li> <li>➢ Rash</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>: <ul style="list-style-type: none"> <li>➢ Assess hydration</li> <li>➢ Insertion of NG tube</li> <li>➢ IV/IO access</li> <li>➢ Calculate fluid therapy requirements including maintenance, deficit and ongoing losses</li> </ul> </li> </ul>
Undertake history, examination, investigation and initiate treatment of patients presenting with <i>orthopaedic trauma</i>	<ul style="list-style-type: none"> <li>• Identify the following orthopaedic trauma presentations: <ul style="list-style-type: none"> <li>➢ Simple fractures</li> <li>➢ Dislocations</li> <li>➢ Upper limb injuries particularly hand injuries</li> <li>➢ Spinal injuries</li> <li>➢ Pelvic/lower limb injuries</li> </ul> </li> <li>• Undertake safe initial care of the potential spinal injury patient</li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>: <ul style="list-style-type: none"> <li>➢ Simple joint reductions</li> <li>➢ Interpretation of plain radiology</li> <li>➢ Application of plaster-of-paris backslab to forearm and lower limb including appropriate aftercare</li> <li>➢ Application of digital nerve</li> </ul> </li> </ul>

Element	Knowledge	Skills/Procedures
	<ul style="list-style-type: none"> <li>• Identify and manage: <ul style="list-style-type: none"> <li>➤ rib fracture</li> <li>➤ sternal fracture</li> </ul> </li> <li>• Demonstrate appropriate neurovascular assessment</li> <li>• Identify, order and interpret the most appropriate <b>investigations</b> and provide appropriate <b>treatment</b> including <ul style="list-style-type: none"> <li>➤ Immobilisation</li> <li>➤ Splintage</li> <li>➤ Analgesia</li> <li>➤ Digital nerve blocks</li> </ul> </li> <li>• Demonstrate knowledge of the following <b>danger signs</b>: <ul style="list-style-type: none"> <li>➤ Pain greater than expected</li> </ul> </li> </ul>	<p>block</p>
Undertake history, examination, investigation and initiate treatment of patients presenting with <i>skin and soft tissue injury</i>	<ul style="list-style-type: none"> <li>• Assess the size and depth of burns and manage with appropriate dressing and follow up</li> <li>• Identify those patients requiring referral for serious burns</li> <li>• Identify simple and complex lacerations and refer as appropriate</li> <li>• Identify and provide appropriate <b>treatment</b> for wounds ensuring that correct steps to avoid infection are followed</li> <li>• Identify the most appropriate local anaesthetic technique.</li> <li>• Establish tetanus status of patient</li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>: <ul style="list-style-type: none"> <li>➤ Administer appropriate pain relief</li> <li>➤ Apply appropriate burn first aid and dressing</li> <li>➤ Application of local anaesthetic</li> <li>➤ Clean and debride contaminated wounds</li> <li>➤ Fluid replacement therapy</li> <li>➤ Apply wound closure and after care</li> </ul> </li> </ul>
Undertake history, examination, investigation and initiate treatment of patients presenting with <i>early pregnancy bleeding/pain</i>	<ul style="list-style-type: none"> <li>• Identify the <b>underlying cause</b> of bleeding/pain including the distinguishing features of: <ul style="list-style-type: none"> <li>➤ Threatened/incomplete miscarriage</li> <li>➤ Ectopic pregnancy</li> <li>➤ Rhesus status</li> </ul> </li> <li>• Identify, order and interpret the most appropriate <b>investigations</b> and provide appropriate <b>treatment</b> including <ul style="list-style-type: none"> <li>➤ Analgesia</li> <li>➤ Appropriate referral</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>: <ul style="list-style-type: none"> <li>➤ Venous cannulation</li> <li>➤ Vaginal exam</li> <li>➤ Removal of contraceptive products from cervical os</li> </ul> </li> </ul>
Undertake history, examination, investigation and initiate treatment of patients presenting with <i>pregnancy bleeding/pain greater than 20 weeks</i> .	<ul style="list-style-type: none"> <li>• Identify the <b>underlying cause</b> of bleeding/pain including the distinguishing features of: <ul style="list-style-type: none"> <li>➤ Eclampsia</li> <li>➤ Premature labour</li> <li>➤ Placenta abruptio/previa</li> </ul> </li> <li>• Identify order and interpret the most appropriate <b>investigations</b> and provide immediate referral to labour ward.</li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>: <ul style="list-style-type: none"> <li>➤ Foetal Doppler</li> <li>➤ Oxygen delivery</li> </ul> </li> </ul>
Undertake history, examination, investigation and initiate treatment of patients presenting with <i>headache</i> .	<ul style="list-style-type: none"> <li>• Identify the <b>underlying cause</b> of headache including the distinguishing features of: <ul style="list-style-type: none"> <li>➤ Migraine</li> <li>➤ Tension headache</li> <li>➤ Subarachnoid Haemorrhage</li> <li>➤ Meningitis</li> <li>➤ Space-occupying lesion</li> <li>➤ Temporal arteritis</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>: <ul style="list-style-type: none"> <li>➤ Venous cannulation</li> <li>➤ Lumbar puncture</li> </ul> </li> </ul>

Element	Knowledge	Skills/Procedures
	<ul style="list-style-type: none"> <li>• Identify, order and interpret the most appropriate <b>investigations</b> and provide appropriate <b>treatment</b> including:               <ul style="list-style-type: none"> <li>➤ Analgesia</li> <li>➤ IV antibiotics</li> <li>➤ Cerebral CT scan</li> </ul> </li> <li>• Demonstrate knowledge of the following <b>danger signs</b>:               <ul style="list-style-type: none"> <li>➤ Pain history (worst ever/thunderclap)</li> <li>➤ With collapse</li> <li>➤ Localising neurological signs</li> </ul> </li> </ul>	
Undertake history, examination, investigation and initiate treatment of patients presenting with <i>toxicological emergencies</i>	<ul style="list-style-type: none"> <li>• Identify the <b>underlying cause</b> of the presentation including the distinguishing features of:               <ul style="list-style-type: none"> <li>➤ Poisoning and drug overdose</li> <li>➤ Envenomation</li> </ul> </li> <li>• Carry out a risk assessment</li> <li>• Recognise common toxidromes and understand the role of antidotes and antivenoms</li> <li>• Access poisons information and demonstrate understanding of the legal, psychiatric and social aspects of overdose.</li> <li>• Identify, order and interpret the most appropriate <b>investigations</b> and provide appropriate <b>treatment</b> including               <ul style="list-style-type: none"> <li>➤ BLS</li> <li>➤ Airway and circulation support</li> <li>➤ Antidotes</li> <li>➤ NAC paracetamol level and interpretation</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>:               <ul style="list-style-type: none"> <li>➤ Basic Airway Manoeuvres</li> <li>➤ BSL</li> <li>➤ ECG</li> <li>➤ Decontamination including charcoal</li> <li>➤ NAC administration</li> </ul> </li> </ul>
Undertake history, examination, investigation and initiate treatment of adult patients presenting with <i>vomiting</i>	<ul style="list-style-type: none"> <li>• Identify the <b>underlying cause</b> of vomiting including the distinguishing features of:               <ul style="list-style-type: none"> <li>➤ Gastroenteritis</li> <li>➤ Raised ICP</li> <li>➤ Hyperemesis gravidarum</li> <li>➤ Upper GI bleed</li> <li>➤ DKA</li> </ul> </li> <li>• Identify, order and interpret the most appropriate <b>investigations</b> and provide appropriate <b>treatment</b> including:               <ul style="list-style-type: none"> <li>➤ Antiemetics</li> <li>➤ IV fluids</li> <li>➤ Insulin therapy</li> <li>➤ Blood product replacement</li> </ul> </li> <li>• Demonstrate knowledge of the following <b>danger signs</b>:               <ul style="list-style-type: none"> <li>➤ Distended abdomen</li> <li>➤ Haematemesis</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>:               <ul style="list-style-type: none"> <li>➤ Venous cannulation</li> <li>➤ Nasogastric intubation</li> <li>➤ IV/IO access</li> <li>➤ Fluid and electrolyte management</li> </ul> </li> </ul>
Undertake history, examination, investigation and initiate treatment of patients presenting with <i>abdominal pain</i>	<ul style="list-style-type: none"> <li>• Identify the <b>underlying cause</b> of abdominal pain including the distinguishing features of:               <ul style="list-style-type: none"> <li>➤ Acute appendicitis</li> <li>➤ Bowel obstruction</li> <li>➤ Bowel ischemia</li> <li>➤ Diverticulitis</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Safely and appropriately carry out the following <b>procedures</b>:               <ul style="list-style-type: none"> <li>➤ Venous cannulation</li> <li>➤ Paracentesis</li> </ul> </li> </ul>

Element	Knowledge	Skills/Procedures
	<ul style="list-style-type: none"><li>➤ Acute peritonitis</li><li>➤ Biliary colic</li><li>➤ Pancreatitis</li><li>➤ Renal colic</li><li>➤ Abdominal aortic aneurysm</li><li>➤ Ectopic pregnancy</li><li>• Identify, order and interpret the most appropriate <b>investigations</b> and provide appropriate <b>treatment</b> including analgesia</li><li>• Identify appropriate surgical referral</li><li>• Demonstrate knowledge of the following <b>danger signs</b>:<ul style="list-style-type: none"><li>➤ Extremes of age</li></ul></li></ul>	

**EMC03 Participate in clinical support activities and administration**

Element	Knowledge	Skills/Procedures
Demonstrate understanding of key <i>legal issues</i> as they relate to emergency medicine including: <ul style="list-style-type: none"> <li>• Duty of care</li> <li>• Consent</li> <li>• Privacy</li> <li>• Documentation</li> <li>• Forensic issues</li> </ul>	<ul style="list-style-type: none"> <li>• Be familiar and compliant with the legal aspects of Emergency Medicine</li> <li>• Describe the principles of informed consent.</li> <li>• Demonstrate understanding of legislation as it applies to the practice of medicine</li> <li>• Demonstrate knowledge of legislation regarding confidentiality and apply the principles of confidentiality to normal practice</li> </ul>	<ul style="list-style-type: none"> <li>• Provide adequate clear information for patients to make informed consent particularly in high risk procedures</li> </ul>
Demonstrate understanding of the key elements of <i>clinical risk management</i> in the emergency department including: <ul style="list-style-type: none"> <li>• Telephone advice and triage</li> <li>• Consultation</li> <li>• Transfer of responsibility</li> <li>• Patient discharge</li> </ul>	<ul style="list-style-type: none"> <li>• Apply principles of risk management to emergency care</li> <li>• Identify areas where care can be improved by the use of critical incident reporting</li> <li>• Involve senior personnel in high risk areas to make the patient and family aware of the problems and potential solutions</li> </ul>	<ul style="list-style-type: none"> <li>• Communicate effectively to ensure continuity of care and reduce risk</li> </ul>
Demonstrate an understanding of the key issues surrounding <i>pre-hospital care and retrieval</i> .	<ul style="list-style-type: none"> <li>• Demonstrate an understanding of pre-hospital care systems to ensure optimal patient care across the pre-hospital / E.D. interface.</li> </ul>	<ul style="list-style-type: none"> <li>• Communicate effectively with pre-hospital staff including ambulance teams.</li> </ul>
Participate in patient <i>admission, transfer or discharge</i> .	<ul style="list-style-type: none"> <li>• Identify the most appropriate course of action for patient including: <ul style="list-style-type: none"> <li>➢ Admission</li> <li>➢ Transfer</li> <li>➢ Discharge</li> </ul> </li> <li>• Clarify patient needs for community support services on discharge and identify appropriate community support services</li> <li>• Ensure patient has requirements for discharge and documentation is completed as per policy and procedure</li> <li>• Respect cultural issues during process of discharge/admission/transfer.</li> </ul>	<ul style="list-style-type: none"> <li>• Communicate effectively with patients, family and health team members regarding patient disposition</li> <li>• Write concise, informative discharge letters</li> </ul>
Work effectively as a member of a <i>team</i>	<ul style="list-style-type: none"> <li>• Demonstrate an understanding of how teams work effectively and what can make them ineffective</li> <li>• Identify and manage time critical patients</li> <li>• Demonstrate an ability to prioritise tasks whilst minimising error</li> <li>• Discuss the impact of shift work and stress on the well being of emergency practitioners</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate principles of good communication – and use of verbal and body language to communicate.</li> </ul>
Identify sources of <i>risk to personal health and wellbeing</i> and follow procedures to minimise risk	<ul style="list-style-type: none"> <li>• Identify environments, situations and client-related risk factors which may impact health and well-being including: <ul style="list-style-type: none"> <li>➢ Noisy, busy department</li> <li>➢ Conflicting pressures to complete multiple tasks</li> <li>➢ Challenging clients</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate awareness of risks and ability to address in appropriate manner including: <ul style="list-style-type: none"> <li>➢ Self-care</li> <li>➢ Time management</li> <li>➢ Communication</li> <li>➢ Counselling support if</li> </ul> </li> </ul>

Element	Knowledge	Skills/Procedures
	<ul style="list-style-type: none"> <li>➤ Inter-professional conflict and competing priorities within time-critical situations</li> </ul>	<p>necessary</p> <ul style="list-style-type: none"> <li>➤ Mentoring</li> </ul>
<p><i>Communicate</i> and work effectively with <i>diverse</i> groups of stakeholders. Diversity may include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Gender</li> <li>• Religion</li> <li>• Culture</li> <li>• Sexuality</li> </ul>	<ul style="list-style-type: none"> <li>• Identify issues which may impact effective communication and relationships including: <ul style="list-style-type: none"> <li>➤ Working styles</li> <li>➤ Values, attitudes and background</li> <li>➤ Personality</li> <li>➤ Generational differences</li> <li>➤ Issues of power</li> </ul> </li> <li>• Show awareness of cultural issues and practices which may impact service delivery.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate an ability to work and communicate effectively with diverse groups.</li> <li>• Demonstrate an ability to work in a culturally competent way which shows respect for and understanding of diversity in the workplace.</li> </ul>

## Appendix 1 Assessment program for the Emergency Medicine Certificate

### Introduction

The purpose of this appendix is to outline the assessment methodology which will be used in the Emergency Medicine Certificate. Assessment in this context has two main goals; to optimise the capabilities of learners by providing motivation and direction for further learning, and to identify those practitioners who have developed satisfactory skills, knowledge and behaviours to be considered competent at the identified level<sup>1</sup>

Competence in this context, refers to the appropriate use of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflection in daily practice for the benefit of the individuals and communities being served<sup>2</sup>. When developing an assessment program, we need to consider not only the candidate's technical knowledge, but also their professional expertise.

Assessment can be either **formative** (guiding future learning, providing reassurance, promoting reflection and shaping values) or **summative** (making an overall judgement about competence, fitness to practice or qualification for advancement to higher levels of responsibility)<sup>1</sup> Other important factors to consider in the development of an assessment program are:

- Skills and experience of supervisors
- Context of assessment (workplace based or simulated)
- Timing of assessment

In order to identify the appropriate assessment methodology, it is also critical to identify the learning outcomes or performance criteria within the curriculum as assessment must map transparently and consistently to these criteria.

### Assessment Model

The principles of assessment state that any method used must be:

- Reliable
- Valid
- Positive in its educational impact
- Cost effective
- Acceptable<sup>3</sup>

Current approaches to assessment suggest that the integrated or programmatic approach to assessment is the most appropriate. This is where assessment is seen as a 'program' across the entire training, rather than a specific instrument<sup>4</sup>

All assessment methods have strengths and flaws and no single assessment method has all of the required qualities. Therefore, a **combination of methods over a range of times** has been developed to ensure the program is reliable, clinically relevant and educationally sound.

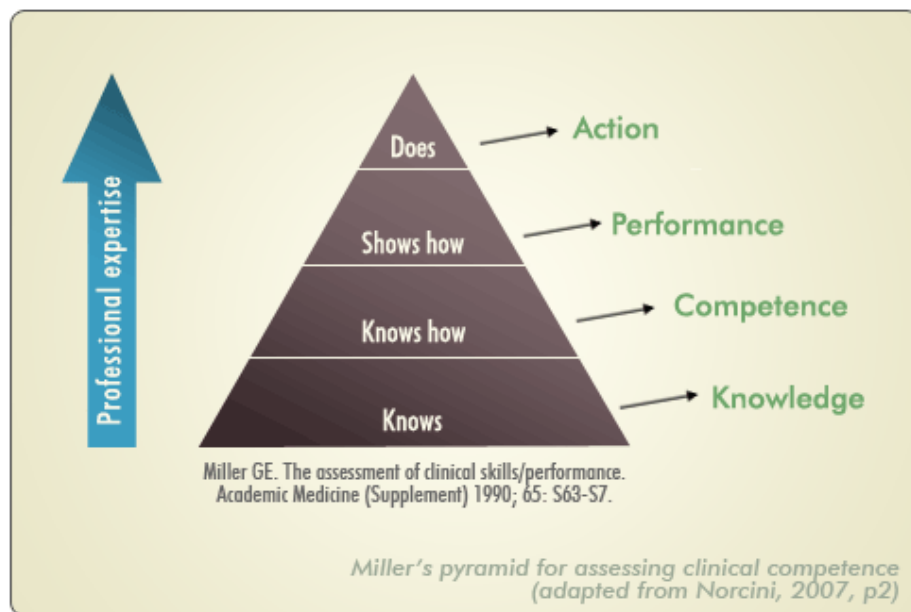
### Educational Theory

Blooms Taxonomy identifies three domains, cognitive (intellectual capability), affective (feelings, emotions and behaviour) and psychomotor (manual and physical skills). In each of the three domains, there is an increasing level of complexity and difficulty, each of which must be mastered before moving on to the next.

A similar representation has also been created by Miller<sup>5</sup> who developed a pyramid to describe the various levels of clinical or workplace competence. As candidates develop more complex skills, acquire and apply new knowledge and reflect and improve their capabilities they move towards a stage of 'embedded' competency whereby these skills and behaviours become part of everyday unconscious practice.

As well as assessing a candidate's knowledge, it is critical to determine whether they can apply this knowledge in practice as described in the diagram below:

## Miller's Pyramid



## Workplace based Assessment

Workplace-based assessment refers to the assessment of what doctors actually do in practice and is predominantly carried out in the workplace itself. This method of assessment aligns well to Miller's Pyramid as it allows us to assess the 'does' that is, the actual performance of a candidate in a clinical setting.

Workplace-based assessment offers the opportunity to connect learning and assessment, provides a means to assess areas that require evaluation of actual performance in practice and should be included as part of an overall assessment program. In order to ensure issues of reliability are overcome, the following activities should be undertaken:

- Specification of standards, criteria, scoring guides
- Calibration of assessors and moderators
- Moderation of results
- Verification and audit through the collection of assessment data<sup>7</sup>

It seems logical that in a program where much of the learning and training is to take place in the workplace, that at least part of the assessment should also be workplace-based.

## Blueprinting

To ensure that assessments are integrated with the curriculum, topics chosen for assessment should map directly onto the curriculum to ensure that there is both adequate coverage and widespread sampling.

The type of competency being assessed will determine the method of assessment. Professional performance, leadership and team work are best assessed in the workplace while other competencies may be more reliably assessed using external methods such as written exams and reports.

**Assessment Summary**

The following summary describes the tools to be used in the Emergency Medicine Certificate as well as how this tool will be applied and what is to be assessed.

<b>Emergency Medicine Certificate</b>		
<b>Tool</b>	<b>What is assessed</b>	<b>Methodology</b>
MCQ Examination	Knowledge of key topic areas	1 hour online MCQ under supervision
Mini-CEX	History taking, examination, diagnosis and management	5 x15-20 minute mini clinical encounters observed by supervisor
Direct Observation of Procedural Skills (DOPS)	Ability to safely and appropriately carry out procedures	Supervisor to complete checklist of procedures observed. DOPS forms to be completed for highlighted procedures.
e-portfolio	Procedures, attendance at EMST/ELS/APLS workshops, reflection, online assessment results	Used throughout training program as evidence of achievement of learning outcomes.
Case-Based Discussion	Discussion of case which includes a written report of no more than 1200 words	2 x CBD with supervisor
On-line assessment	Knowledge of key topic areas	On-line quizzes applied at the end of each online module. Self-assessment formative
End of term assessment	Overall competence in the clinical setting	Report to be completed by supervisor

**Procedural Checklist (EMC)**

Whilst undertaking the Emergency Medicine Certificate, the candidate is required to demonstrate competence in a number of procedures. Each of these procedures must be observed by a supervisor in either a workplace or simulated setting. The supervisor is required to submit a DOPS form for the procedures highlighted on the checklist \*. All other procedures must be completed and signed off by the supervisor.

Element	Procedure observed	Date	Signature, name and designation
Basic life support	Successful completion of ELS		
Advanced life support			
Airway	Bag-valve-mask ventilation *		
	Insert oropharyngeal airway		
	Insert nasopharyngeal airway		
	Insertion of LMA		
Breathing	Measure SpO2 - adult		
	Measure SpO2 - child		
	Apply oxygen mask		
	Apply nasal prongs		
	Administer nebuliser		
	Administer medication via a spacer		
	Teach use of a spacer		
Circulation	Bag-valve-mask ventilation		
	IV access – adult		
	IV access – large bore		
	Intraosseous access		
	Arterial puncture		
	Analyse ECG rhythm		
	Safe defibrillation *		
	Estimate degree of dehydration		
	Calculate fluid therapy requirements		
Fluid resuscitation including use of blood products			
Altered/Loss of Consciousness	Perform BSL		
	Insertion of a urinary catheter		
	Insertion of a gastric tube		
Trauma	Spinal immobilisation		
	Application of a semi-rigid collar *		
	In-line immobilisation		
	Splinting of long bone fractures		
	Needle decompression of tension pneumothorax		
	Splinting of pelvic fracture		
	Interpret trauma series Xrays		
	Reduction of a minor joint dislocation		
	Apply plaster of Paris backslab to forearm *		
	Apply plaster of Paris backslab to lower limb *		
	Infiltration of local anaesthetic		
	Digital nerve block		
	Clean wound with minor contamination		
	Suture wound *		
Close wound with tissue adhesive			
Providing pain relief	Intranasal analgesia		
	Parenteral analgesia		

Paediatrics	Examine ear, nose and throat		
	Obtain a clean catch urine sample		
	IV access - child		
	Measure SpO2 - child		
Gynaecological	PV examination		
	Removal of products from Os		
	Foetal doppler		
	Oral analgesia		

**NOTE - The supervisor is required to submit a DOPS form for the procedures highlighted in the matrix \*.**

## **Description of the Assessment Methods**

### **Mini-CEX**

The competencies evaluated by the mini-CEX are: history taking or medical interviewing skills, physical examination skills, clinical judgement skills, professionalism or humanistic qualities and organisation/efficiency skills. Candidates are also rated on their overall clinical competence.

### **Case-based discussion**

Case-based discussion is a structured interview designed to explore professional judgement exercised in clinical cases. Questions asked should elicit information about decision-making, problem-solving, team work and ethical practice.

### **e-Portfolio**

Workplace-based assessments are usually collected within a structured portfolio which demonstrates a doctor's education and practice achievements. It aims to serve as the reflective learning log of the candidate, available to be shared with his/her supervisor. It also acts as a repository for assessments and charts progression throughout the course.

### **Online Assessment**

Primarily a formative assessment tool, online assessment allows learners to self-assess their level of knowledge by undertaking online quizzes at the completion of each module. This will highlight areas which may require further study or acquisition of knowledge/skill.

### **DOPS**

Direct observation of procedural skills is an assessment method whereby a learner is observed carrying out a procedure and is assessed as either competent or not yet competent in the undertaking of this task.

### **Glossary**

<b>e-portfolio</b>	an electronic journal or repository for documenting and recording candidate's procedures, activities, reflections, results
<b>CBD</b>	Case Based Discussion
<b>Mini-CEX</b>	Mini Clinical Exercise
<b>MCQs</b>	Multiple Choice Questions
<b>DOPS</b>	Direct Observation of Procedural Skills

**References**

1. Epstein RM. Assessment in Medical Education. *The New England Journal of Medicine*. 2007;356(4):10.
2. Epstein RM, Hundert EM. Defining and assessing professional competence. *JAMA*. 2002;287:226-35.
3. Schuwirth LWT, Van der Vleuten C. How to design a useful test: the principles of assessment. Edinburgh: ASME; 2006.
4. Van der Vleuten C, Schuwirth LWT. Assessing professional competence: from methods to programs. *Medical Education*. 2005;39:309-17.
5. Miller G. The assessment of clinical skills/competence/performance. *Academic Medicine*. 1990;65:Suppl:S63-S7.
6. Norcini JJ. *Workplace-based Assessment in Clinical Training*. Edinburgh: Association for the Study of Medical Education; 2007.
7. Swanwick T. Workplace-based assessment. *British Journal of Hospital Medicine*. 2009;70(5):290-3.