

Curriculum

Emergency Medicine Certificate and Diploma

October 2019

NS248

Version 1.3

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

Emergency Medicine Certificate Program

Emergency Medicine Certificate			
Tool	What is assessed	Methodology	
Mini-CEX (Mini-Clinical Evaluation Exercise)	 History taking, examination, diagnosis and management 	 5 x 15-20 minute Mini-Clinical evaluation exercises observed by supervisor. 	
Procedural Checklist	• Ability to safely and	 Supervisor to complete checklist of procedures observed. 	
Direct Observation of Procedural Skills (DOPS)	appropriately carry out procedures	 6 x DOPS forms to be completed for highlighted procedures. 	
ePortfolio	• Written ED case reflections	 10 x written case reflections. Used throughout training program as evidence of achievement of learning outcomes and to enable candidates to reflect on their clinical practice. 	
Case Based Discussion (CbD)	 Discussion of case which includes a written report of no more than 1200 words 	• 2 x CbD with supervisor (including 1200 word written report)	
On-line assessment	• Knowledge of key topic areas	 On-line quizzes applied at the end of each online module. Self-assessment formative. 	
Statement of attainment	 Overall competence in the clinical setting 	 To be completed by supervisor to confirm candidates overall results and readiness to sit the MCQ exam. 	
MCQ Examination	• Knowledge of key topic areas	• 1 hour online MCQ under supervision	

Unit	Title	Training	Assessment
Core Units			
Complete th	e three (3) core units.		
EMC01	Undertake initial assessment and management	WorkplaceOnline	 Mini-CEX CbD Procedural checklist BLS and ALS Workshop DOPS Exam
EMC02	Manage common emergency presentations	• Workplace • Online	 Mini-CEX CbD Procedural checklist BLS and ALS Workshop DOPS Exam
EMC03	Participate in clinical support activities and administration	WorkplaceOnline	 Mini-CEX CbD ePortfolio Exam

Workshops

Candidates are also required to complete the following workshops:

- Advanced Life Support (ALS)
- Basic Life Support (BLS)

Subject areas covered in the Certificate

Title of unit	Content of modules within unit
Undertake initial assessment and	Prioritisation, history taking and examination
management	Infection control
	• Patent airway
	Breathing difficulties
	Circulation difficulties
	Seizure or altered level of consciousness/confusion
	Relieve pain
	• Trauma
	Psychiatric emergencies
	Elderly patients
Manage common emergency presentations	Altered level of consciousness/ confusion
	• Chest pain
	• Dyspnoea
	• Collapse/syncope
	Febrile child
	Child with breathing difficulty
	Paediatric trauma
	Children with vomiting
	Orthopaedic trauma
	• Skin and soft tissue injury
	Early pregnancy bleeding and pain
	 Pregnancy-bleeding and pain more than 20 weeks
	Headache
	Toxicological emergencies
	Vomiting
	Abdominal/pelvic pain
	Ophthalmological
Participate in clinical support activities and administration	• Legal issues
aummstration	Clinical risk management
	Pre-hospital care and retrieval
	Admission, transfer and discharge
	Team work
	Personal health and well-being
	Communication

Core Units for the Emergency Medicine Certificate Program

EMC01 Undertake initial assessment and management

Module	Knowledge	Skills/Procedures
Utilise the emergency medicine approach to the undifferentiated patient to prioritise tasks using effective history taking and examination techniques.	 Identify those patients who are: Unstable with the immediate need of resuscitation Potentially unstable requiring emergent recognition and intervention Physiologically stable but undiagnosed Recognise critical symptoms and symptom patterns. Apply knowledge of symptomatology to determine the likely differential diagnosis. Demonstrate systematic assessment of undifferentiated presentations – chest pain, shortness of breath, abdominal pain, altered level of consciousness. Demonstrate awareness of the influence of age, gender and sociocultural factors. Identify and order investigations as appropriate. Recognise and identify 'red flags' (danger signs) 	 Elicit a relevant focused history and identify and synthesise problems Derive a plan for initial management, investigation, treatment and disposition.
Demonstrate the ability to manage and control infection in patients.	 Identify the principles of infection control and the ACEM policy relating to infectious disease. Discuss the importance of appropriate immunisation status. Demonstrate knowledge of requirements and procedures for notification of reportable infectious diseases to local health authorities. 	 Comply with universal precautions regarding hand washing and personal protective equipment. Practise aseptic technique whenever relevant. Actively engage in local infection control procedures.
Assess, establish and maintain a patent airway.	 Identify the obstructed airway optimising the patient's position for airway management. Identify and commence appropriate treatment for: Complete obstruction Partial obstruction Conscious patient (adults and children) Unconscious patient Complete the stabilisation sequence Recognise when further assistance is required. Carry out cervical spine protection as part of airway assessment. 	 Safely and appropriately carry out the following procedures: Simple airway manoeuvres Suction Insertion Oral, NP airways Insertion of LMA In-line C-spine immobilisation Application of hard cervical collar
Assess and treat patients presenting with breathing difficulties.	 Recognise acute life threats to breathing and institute emergency treatment including non-invasive ventilation. Recognise the need for urgent investigation (ECG, CXR, arterial blood gas analysis) and treatment Undertake assessment of adequacy of ventilation both RR and effort Measure SpO2 Interpret blood gases 	Safely and appropriately carry out the following procedures: • Auscultation of chest • BVM ventilation • Oxygen therapy • Pulse oximetry
Assess and treat patients presenting with circulation difficulties.	 Undertake assessment of the adequacy of circulation and interpret PR, BP including postural drop Recognise cardiovascular compromise especially the physiological mechanisms of compensation and the state of adequate cardiac output Identify and manage shock including: hypovolemic cardiogenic distributive obstructive Demonstrate an awareness of the principles of fluid resuscitation 	 Safely and appropriately carry out the following procedures: IV access including large bore resuscitation lines Safe defibrillation Arterial puncture Estimate degree of dehydration Fluid resuscitation including use of blood products

Module	Knowledge	Skills/Procedures
	 Identify common arrhythmias including management of life-threatening arrhythmias 	
	Recognise the need for coronary reperfusion therapy	
Assess and treat patients presenting with seizure or	 Recognise the need for airway protection 	Safely and appropriately carry out the following procedures:
altered level of consciousness	 Measure BSL in order to identify the presence or absence of hypoglycaemia 	 Simple airway opening manoeuvres
	Measure Glasgow Coma Score	IV/IO access
	 Undertake assessment of pupillary reactions 	 Positioning of the
	 Identify localising neurological signs 	unconscious patient
	 Demonstrate knowledge of the principles of seizure management including appropriate pharmacology 	 Insertion of gastric tube Insertion of IDC
	 Demonstrate knowledge of the physical care of the unconscious patient 	
Safely and effectively relieve pain in a timely manner	 Recognise the most appropriate method of pain relief for each presentation. 	Safely and appropriately carry out the following procedures:
	• Demonstrate knowledge of the various types of	• IV access
	analgesia including:	 Digital block
	• Oral	• Splinting
	Parenteral	 Intranasal analgesia
	• Local	
	Inhalation	
	 Directed therapy including paediatric-specific techniques 	
Recognise, assess and treat patients who have suffered	Obtain pre-hospital information using MIST method	Safely and appropriately carry out the following procedures:
trauma	Obtain patient history which should include:	Cervical spine immobilisation
	° Allergies	 Appropriate simple airway
	 Medications Dat history 	techniques
	 Past history Last ate/drank 	Decompression of tension
	 Events before injury 	pneumothorax
	 Demonstrate knowledge of ABCD approach to trauma 	Large bore IV access
	and undertake following assessment/examinations: ° Airway	 Appropriate fluid resuscitation including use of blood products
	° Breathing and ventilation	 Splinting of pelvic and long
	 Circulation and haemorrhage control 	bone fractures
	° Consciousness level	• Insertion of urinary catheter
	° Neurology	 Insertion of oral naso-gastric catheter
	° Cervical spine	 Interpret trauma series x-rays
	 Motor and sensory levels 	Suture wound
	 GSC Recognise patterns of trauma, utilising primary and secondary surveys 	 Close wound with tissue adhesive
	 Identify and treat life and limb threatening injury 	
	 Demonstrate an understanding of appropriate resource mobilisation and referral 	
Undertake assessment of patient's psychiatric state	 Identify those who are alcohol and drug / substance dependent. 	 Prescribe and/or provide appropriate restraint
including but not limited to:	 Identify appropriate treatment which may include 	including verbal, physical and pharmacological for the
 Likelihood of self-harm 	referral.	acutely agitated patient.
DepressionAnxiety disorders	 Undertake assessment of suicide risk and liaise with appropriate psychiatric services 	
Acute psychoses	 Discuss the relevant legislation in relation to the mental health act. 	
Behavioural emergencies	 Undertake appropriate responsibilities in accordance 	

Module	Knowledge	Skills/Procedures
Undertake assessment of elderly patients presenting in the emergency department.	 Nnowledge Demonstrate understanding of the issues surrounding elderly patients in the ED including: Adequate support services Increased medical complexity Advanced healthcare directives Identification of vulnerable patients Elder abuse Psychological factors Legal, social and guardianship factors. Understand the frequency and impact of the following in the elderly as a group: Infections Dementia Delirium Cardiovascular events / stroke Demonstrate knowledge of ACEM's policy on the care of elderly patients in the emergency department. Follow local guidelines with regard to the reporting of suspected 'elder abuse'. 	Use validated screening tools for the identification of vulnerable patients.

EMC02 Manage common emergency presentations

Module	Knowledge	Skills/Procedures
Undertake history, examination, investigation and initiate treatment of patients presenting with altered level of consciousness/confusion.	 Identify the underlying cause of altered level of consciousness/confusion including the distinguishing features of: Neurological Sepsis/shock Electrolyte/metabolic abnormalities including hypoglycaemia Poisoning Identify, order and interpret the most appropriate investigation and provide appropriate treatment including: Fluid/electrolyte therapy Airway management Antibiotics Other specific therapies 	 Safely and appropriately carry out the following procedures: Basic airway manoeuvres Venous cannulation BSL Lumbar puncture
Undertake history, examination, investigation and initiate treatment of patients presenting with <i>chest</i> <i>pain</i> .	 Identify the underlying cause of chest pain including the distinguishing features of: ACS (including STEMI, non-STEMI and unstable angina) Pulmonary embolus Pleuritis Pneumonia Pericarditis Aortic dissection Identify the most appropriate investigation/s for the presentation. Provide appropriate treatment including appropriate analgesia. 	 Safely and appropriately carry out the following procedures: Venous cannulation Arterial puncture ECG analysis Chest x-ray interpretation
Undertake history, examination, investigation and initiate treatment of patients presenting with <i>dyspnoea</i>	 Identify the underlying cause of dyspnoea including the distinguishing features of: COPD/Asthma Pneumonia Pulmonary oedema Pulmonary embolus Pneumothorax Bronchiolitis Metabolic causes Identify, order and interpret the most appropriate investigation and provide appropriate treatment including: Oxygen therapy Non-invasive ventilation Bronchodilators 	 Safely and appropriately carry out the following procedures: Venous cannulation Arterial puncture Needle thoracentesis Intercostal catheter
Undertake history, examination, investigation and initiate treatment of patients presenting with collapse/syncope	 Identify the underlying causes of collapse/ syncope including the distinguishing features of: Seizure Hypoglycaemia Arrhythmia Hypovolaemia Cardiac arrest Demonstrate knowledge of the following danger signs: Chest pain Shortness of breath Abnormal ECG Hb low Systemic hypotension 	 Safely and appropriately carry out the following procedures: Venous cannulation Basic life support Defibrillation Advanced life support BSL measurement

Module	Knowledge	Skills/Procedures
	 Identify, order and interpret the most appropriate investigations and provide appropriate treatment including: 	
	° IV Glucose	
	° IV fluids	
	 Acute seizure management 	
Paediatric Undertake history, examination, investigation and initiate treatment of the <i>febrile child</i>	 Identify the underlying cause of fever including the distinguishing features of: Upper respiratory tract infection Infection of the ear, nose, throat Lower respiratory tract infection Urinary tract infection Weningitis Orthopaedic causes including septic arthritis, osteomyelitis Bacteraemia Severe sepsis Identify, order and interpret the most appropriate investigations and provide appropriate treatment including: IV Fluids Anti-pyretics Antibiotics Demonstrate knowledge of the following danger signs: Limping or non-weight-bearing child Severe muscle pain 	 Safely and appropriately carry out the following procedures: Examination of the ear, nose and throat Venous cannulation Intraosseous access Calculate fluid therapy requirements Clean catch urine Urethral catheter Lumbar puncture
Undertake history, examination, investigation and initiate treatment of children presenting with breathing difficulty.	 Floppy, listless child Identify the underlying cause of paediatric respiratory difficulty including the distinguishing feature of: Bronchiolitis Croup Pneumonia Asthma Metabolic Foreign body Identify, order and interpret the most appropriate investigations and provide appropriate treatment including: Oxygen therapy Adrenaline nebuliser Bronchodilators Steroids 	Safely and appropriately carry out the following procedures: • Measure SpO2 • Apply oxygen • Administer nebuliser • Administer and teach use of spacer • Interpret chest x-ray
Undertake history, examination, investigation and initiate treatment of children presenting with paediatric trauma	 Obtain pre-hospital information using MIST method Demonstrate knowledge of ABCD approach to trauma Recognise patterns of trauma, utilising primary and secondary surveys Identify and treat life and limb threatening injury Demonstrate an understanding of appropriate resource mobilisation and referral Identify multi-trauma and orthopaedic trauma Identify children at risk and take steps as appropriate. Identify the signs of non-accidental injury. Demonstrate knowledge of the relevant legislation relating to children at risk including the Child Protection Act. 	 Safely and appropriately carry out the following procedures: Appropriate simple airway techniques Cervical spine immobilisation IV access and fluid resuscitation Application of splinting Application of appropriate analgesia

Module	Knowledge	Skills/Procedures
Undertake history, examination, investigation and initiate treatment of children presenting with <i>vomiting</i>	 Identify the underlying cause of paediatric vomiting including the distinguishing features of: Gastroenteritis Pyloric stenosis UTI Appendicitis Other infections including meningitis DKA Identify when it is necessary to investigate and provide appropriate treatment including: UEC MSU Glucose Rehydration including oral, NG or IV as appropriate Specific treatment for underlying causes Demonstrate knowledge of the following danger signs: Signs of shock or other symptoms of severe dehydration Bile stained vomiting Headache 	Safely and appropriately carry out the following procedures: • Assess hydration • Insertion of NG tube • IV/IO access • Calculate fluid therapy requirements including maintenance, deficit and ongoing losses
Undertake history, examination, investigation and initiate treatment of patients presenting with orthopaedic trauma	 Rash Identify the following orthopaedic trauma presentations: Simple fractures Dislocations Upper limb injuries particularly hand injuries Spinal injuries Pelvic/lower limb injuries Undertake safe initial care of the potential spinal injury patient Identify and manage: rib fracture sternal fracture Demonstrate appropriate neurovascular assessment Identify, order and interpret the most appropriate investigations and provide appropriate treatment including Immobilisation Splint Analgesia Digital nerve blocks 	 Safely and appropriately carry out the following procedures: Simple joint reductions Interpretation of plain radiology Application of plaster-of- paris backslab to forearm and lower limb including appropriate aftercare Application of digital nerve block
Undertake history, examination, investigation and initiate treatment of patients presenting with skin and soft tissue injury	 Pain greater than expected Assess the size and depth of burns and manage with appropriate dressing and follow up Identify those patients requiring referral for serious burns Identify simple and complex lacerations and refer as appropriate Identify and provide appropriate treatment for wounds ensuring that correct steps to avoid infection are followed Identify the most appropriate local anaesthetic technique. 	 Safely and appropriately carry out the following procedures: Administer appropriate pain relief Apply appropriate burn first aid and dressing Application of local anaesthetic Clean and debride contaminated wounds Fluid replacement therapy Apply wound closure and after

Module	Knowledge	Skills/Procedures
Undertake history, examination, investigation	 Identify the underlying cause of bleeding/pain including the distinguishing features of: 	Safely and appropriately carry out the following procedures:
and initiate treatment of patients presenting with <i>early</i>	° Threatened/incomplete miscarriage	 Venous cannulation
pregnancy bleeding/pain	° Ectopic pregnancy	• Speculum vaginal examination
	° Rhesus status	and visualisation of the cervical os
	 Identify, order and interpret the most appropriate investigations and provide appropriate treatment including Analgesia 	
	° Appropriate referral	
Undertake history, examination, investigation	 Identify the underlying cause of bleeding/pain including the distinguishing features of: 	Safely and appropriately carry out the following procedures:
and initiate treatment of patients presenting with	° Eclampsia	• Foetal Doppler
pregnancy bleeding/pain	° Premature labour	• Oxygen delivery
greater than 20 weeks.	 Placenta abruption/previa 	
	 Identify order and interpret the most appropriate investigations and provide immediate referral to labour ward. 	
Undertake history, examination, investigation	 Identify the underlying cause of headache including the distinguishing features of: 	Safely and appropriately carry out the following procedures:
and initiate treatment of patients presenting with	° Migraine	• Venous cannulation
headache.	° Tension headache	• Lumbar puncture
	° Subarachnoid Haemorrhage	
	° Meningitis	
	 Space-occupying lesion 	
	° Temporal arteritis	
	 Identify, order and interpret the most appropriate investigations and provide appropriate treatment including: Analgesia IV antibiotics Cerebral CT scan Demonstrate knowledge of the following danger signs: Pain history (worst ever/thunderclap) With collapse 	
	 Localising neurological signs 	
Undertake history, examination, investigation and initiate treatment of patients presenting with toxicological emergencies	 Identify the underlying cause of the presentation including the distinguishing features of: Poisoning and drug overdose Envenomation Carry out a risk assessment 	Safely and appropriately carry out the following procedures: • Basic Airway Manoeuvres • BSL • ECG
	 Recognise common toxidromes and understand the role of antidotes and anti-venoms 	 Decontamination including charcoal
	 Access poisons information and demonstrates understanding of the legal, psychiatric and social aspects of overdose. 	 NAC administration
	 Identify, order and interpret the most appropriate investigations and provide appropriate treatment including ° BSL 	
	 Airway and circulation support Antidotes 	
	 Antidotes NAC paracetamol level and interpretation 	
Undertake history, examination, investigation	 Identify the underlying cause of vomiting including the distinguishing features of: 	Safely and appropriately carry out the following procedures:
and initiate treatment of adult	° Gastroenteritis	 Venous cannulation
patients presenting with	° Raised ICP	Nasogastric intubation
vomiting		masogastric manation

Module	Knowledge	Skills/Procedures
	 Upper GI bleed DKA 	 Fluid and electrolyte management
	 Identify, order and interpret the most appropriate investigations and provide appropriate treatment including: 	
	° Antiemetics	
	° IV fluids	
	° Insulin therapy	
	 Blood product replacement 	
	 Demonstrate knowledge of the following danger signs: 	
	° Distended abdomen	
	° Haematemesis	
Undertake history, examination, investigation and initiate treatment of patients presenting with abdominal/pelvic pain	 Identify the underlying cause of abdominal/pelvic pain including the distinguishing features of: Acute appendicitis Bowel obstruction Bowel ischemia Diverticulitis Acute peritonitis Biliary colic Pancreatitis Renal colic Abdominal aortic aneurysm Ectopic pregnancy Pelvic Inflammatory Disease (PID) Identify, order and interpret the most appropriate investigations and provide appropriate treatment including analgesia 	 Safely and appropriately carry out the following procedures: Venous cannulation Paracentesis Vaginal exam
	Identify appropriate surgical referral	
	 Demonstrate knowledge of the following danger signs: ° Extremes of age 	
Undertake history, examination, investigation and initiate treatment of patients presenting with common ophthalmological	 Identify the underlying cause of presentation including the distinguishing features of: Conjunctivitis Corneal foreign body 	 Safely and appropriately carry out the following procedures: Removal of foreign body from the eye
emergencies	 Identify the most appropriate investigation/s for and provide appropriate treatment including: Use of a slit lamp 	
	 Use of a slit lamp Toot for visual acuity 	
	 Test for visual acuity Demoval of foreign body from the even 	
	 Removal of foreign body from the eye 	

Module	Knowledge	Skills/Procedures
Demonstrate understanding of key legal issues as they relate to emergency medicine including:	 Be familiar and compliant with the legal aspects of Emergency Medicine 	
Duty of care	• Describe the principles of informed consent.	
Consent	 Demonstrate understanding of legislation as it applies to the practice of medicine 	
• Privacy	 Demonstrate knowledge of legislation regarding 	
Documentation	confidentiality and apply the principles of confidentiality to normal practice	
• Forensic issues	 Provide adequate clear information for patients to make informed consent particularly in high risk procedures 	
Demonstrate understanding of the key elements of <i>clinical risk</i> <i>management</i> in the emergency department including:	 Apply principles of risk management to emergency care Identify areas where care can be improved by the 	
 Telephone advice and triage Consultation Transfer of responsibility 	 use of critical incident reporting Involve senior personnel in high risk areas to make the patient and family aware of the problems and potential solutions 	
Patient discharge	 Communicate effectively to ensure continuity of care and reduce risk 	
Demonstrate an understanding of the key issues surrounding pre- hospital care and retrieval.	 Demonstrate an understanding of pre-hospital care systems to ensure optimal patient care across the pre-hospital / E.D. interface. 	
	 Communicate effectively with pre-hospital staff including ambulance teams. 	
Participate in patient admission, transfer or discharge.	 Identify the most appropriate course of action for patient including: 	
	° Admission	
	° Transfer	
	 Discharge Clarify patient needs for community support services on discharge and identify appropriate community support services 	
	 Ensure patient has requirements for discharge and documentation is completed as per policy and procedure 	
	 Respect cultural issues during process of discharge/admission/transfer. 	
	 Communicate effectively with patients, family and health team members regarding patient disposition 	
	 Write concise, informative discharge letters 	
Work effectively as a member of a team	 Demonstrate an understanding of how teams work effectively and what can make them ineffective 	
	• Promote the sharing of information and resources	
	 Identify roles and responsibilities within a team 	
	Identify and manage time critical patients	
	 Demonstrate an ability to prioritise tasks whilst minimising error 	
	 Discuss the impact of shift work and stress on the well-being of emergency practitioners 	
	 Demonstrate principles of good communication – and use of verbal and body language to communicate. 	
	Actively seek the views of others	
	 Employ strategies to manage conflict of interests and differences of opinion 	

Module	Knowledge	Skills/Procedures
Identify sources of risk to personal health and wellbeing and follow procedures to minimise risk	 Identify environments, situations and client- related risk factors which may impact health and well-being including: 	
	° Noisy, busy department	
	 Conflicting pressures to complete multiple tasks 	
	° Challenging clients	
	 Inter-professional conflict and competing priorities within time-critical situations 	
	 Demonstrate awareness of risks and ability to address in appropriate manner including: 	
	° Self-care	
	° Time management	
	° Communication	
	 Counselling support if necessary 	
	° Mentoring	
<i>Communicate</i> and work effectively with <i>diverse</i> groups of	 Identify issues which may impact effective communication and relationships including: 	
stakeholders. Diversity may include but is not limited to:	 Working styles 	
Gender	 Values, attitudes and background 	
Religion	° Personality	
Culture	 Generational differences 	
Sexuality	° Issues of power	
• Sexuality	 Show awareness of cultural issues and practices which may impact service delivery. 	
	 Demonstrate an ability to work and communicate effectively with diverse groups. 	
	 Demonstrate an ability to work in a culturally competent way which shows respect for and understanding of diversity in the workplace. 	

Emergency Medicine Diploma Program

Emergency Medicine Diploma			
Mini-CEX (Mini-Clinical Evaluation Exercise)	 History taking, examination, diagnosis and management 	 8 x 15-20 minute Mini-Clinical evaluation exercises observed by supervisor. 	
Procedural Checklist	 Ability to safely and appropriately carry out 	 Supervisor to complete checklist of 44 procedures observed. 	
Direct Observation of Procedural Skills (DOPS)	procedures	 9 x DOPS forms to be completed for highlighted procedures. 	
ePortfolio	• Reflection on ED cases	 12 x Reflective Journal Entries. Used throughout training program as evidence of achievement of learning outcomes and to enable candidates to reflect on their clinical practice. 	
Case Based Discussion (CbD)	• Analysis of event, situation or problem	• 4 x CbD with supervisor (including 1200 word written report).	
Audit	• Analysis of current department practice	• 1 x 1200 word report.	
On-line assessment	• Knowledge of key topic areas	 On-line quizzes applied at the end of each online module. Self-assessment formative. 	
End of Course Report	• Overall competence in the clinical setting	 Report to be completed by supervisor to confirm candidates overall results and readiness to sit the MCQ exam. 	
MCQ Examination	 Knowledge of key topic areas 	• 1 hour online MCQ under supervision.	

Unit	Title	Training	Assessment
Core Units	·	·	
Complete the three (3) cc	pre units.		
EMD01	Manage complex emergency presentations	WorkplaceOnlineWorkshop	 Mini-CEX CBD Procedural checklist DOPS Exam
EMD02	Participate in advanced clinical support activities	WorkplaceOnlineWorkshop	e-portfolioObservationExam
EMD03	Demonstrate advanced professional, legal and ethical practice	WorkplaceOnlineWorkshop	 e-portfolio Peer assessment Observation Exam

Workshops

Candidates are also required to complete two (2) of the following four (4) workshop options:

- Advanced Paediatric Life Support (APLS) or Advanced Paediatric Emergency Medicine (APEM)
- Early Management of Severe Trauma (EMST) or Emergency Trauma Management (ETM)
- Advanced and Complex Medical Emergencies (ACME)
- Effective Management of Anaesthetic Crisis (EMAC)

Subject areas covered in Diploma

Title of Unit	Content of modules
EMD 01 Manage complex emergency	• Difficult airway
presentations	Complex breathing difficulties
	Cardiac emergencies
	Haemodynamic emergencies
	Complex trauma emergencies
	Neurological emergencies
	Complex burns
	Complex wounds
	ENT emergencies
	Ophthalmological emergencies
	Environmental emergencies
	Infectious diseases
	Metabolic and endocrine emergencies
	Musculoskeletal emergencies
	Obstetric and gynaecological emergencies
	Advanced pain relief
	Complex psychiatric emergencies
	Advanced toxicological and toxinological
	Newly born baby
	• Ill infant
	• Injured infant or child
EMD 02 Participate in advanced clinical	Quality assurance and improvement
support activities	Public health issues
	Disaster management
	• Emergency health care in rural and remote context
	Indigenous health issues
	• Emergency retrieval and transportation
	Referral and transfer
EMD 03 Demonstrate advanced	Professional and ethical behaviour
professional, legal and ethical practice	Legal practice and forensic medicine
	Leadership and management skills
	Prioritisation and decision-making skills
	Evidence-based approach to medicine
	Advanced communication skills
	Supervision and teaching

Core Units for the Emergency Medicine Diploma Program:

EMD01 Manage complex emergency presentations

Element	Knowledge and skills	Procedures
Undertake history, examination, investigation and initiate treatment of patients presenting with a <i>difficult</i> <i>airway</i>	 Assess patients for likely difficult airway 	Safely and appropriately
	 Identify patients with a potential airway problem 	carry out the following procedures:
	Demonstrate familiarity with Rapid Sequence Induction	'
	including the pharmacology of the common drugs:	 Rapid Sequence Induction*
	° Suxamethonium and alternative agents	 Endotracheal
	° Induction agents	Intubation with C-
	 Maintenance of anaesthesia for ventilation 	spine immobilisation
	 Develop a failed intubation algorithm 	 Use of a Bougie
	 Demonstrate awareness of the varieties of equipment available to manage a difficult airway including Intubating LMA 	 Needle cricothyrotomy Surgical
	• Discuss when to "electively " manage a patient with a patent airway due to need for transport/ investigations/ to allow other management	cricothyrotomy
	 Identify the most appropriate investigation/s and provide appropriate treatment for: 	
	 Upper airway obstruction 	
	• Describe the requirements for preparing a difficult airway box	
Undertake history,	 Identify the underlying cause of complex breathing difficulties 	Safely and appropriately
examination, investigation and	including the distinguishing features of:	carry out the following
initiate treatment of patients presenting with <i>complex</i>	° Severe asthma	procedures:
breathing difficulties	 Exacerbations of COPD 	Non-invasive
5 //	° Acute pulmonary oedema	ventilation including BiPAP and CPAP
	 Pulmonary embolism 	 Positive pressure
	° Pneumonia	ventilation
	° Pneumothorax	 Set-up of transport
	° Haemothorax	ventilator*
	 Pleural effusion 	 Aspiration of
	° Pneumomediastinum	pneumothorax
	 Identify the most appropriate investigation/s and provide appropriate treatment including pharmacotherapy for: 	 Insertion of an intercostal catheter
	° Severe asthma	
	 salbutamol nebulised and IV 	
	 hydrocortisone 	
	 ipratropium bromide 	
	 risks of intubation and ventilation 	
	° COPD	
	 O2 therapy and risk of hypercapnia 	
	 Salbutamol/ ipratropium bromide/hydrocortisone 	
	 early use of BiPAP 	
	 Consider and treat for infection/ pulmonary oedema 	
	° APO	
	 GTN 	
	 Frusemide 	
	 Morphine 	
	 CPAP/BiPAP 	
	 ECG & cardiac biomarkers 	
	° PE	
	 Use of clinical criteria (eg Wells) to risk stratify 	
	 VQ vs CTPA 	
	 Heparin 	
	 Thrombolysis in massive PE 	
	° Pneumonia	
	 Pneumonia Severity Assessment Index 	
	 Antibiotic therapy as per Antibiotic guidelines 	

Element	Knowledge and skills	Procedures
	 Look for systemic sepsis 	
	 Special consideration in the immunosuppressed + wet 	
	tropic areas	
	 Interpret chest x-rays and blood gases 	
	 Demonstrate an understanding of respiratory failure (type I and II) 	
	 Discuss the trigger points at which to support ventilation or escalate treatment. 	
	 Differentiate the contribution of pulmonary and cardiac causes of dyspnoea 	
	 Management of a transport ventilator including set-up, adjustment and trouble shooting 	
Undertake history, examination, investigation and	 Identify the underlying cause of cardiac emergency including the distinguishing features of: 	Safely and appropriately carry out the following
initiate treatment of patients	 Acute Coronary Syndrome including: 	procedures:
presenting with <i>cardiac</i> emergencies	 Acute ischemia with ST elevation and non-ST elevation (STEMI and Non-STEMI) 	 Application of external pacemaker
	 Acute pulmonary oedema 	Cardioversion
	° Common arrhythmias	
	 Hypertrophic Obstructive Cardiomyopathy 	
	° ECG changes in other diseases	
	 Electrolyte disturbances 	
	 Common poisonings 	
	° Syncope and collapse	
	° Benign causes	
	° Serious causes	
	1. Acute Coronary Syndrome	
	• Discuss non-coronary causes of chest pain including:	
	° pulmonary embolus,	
	° pericarditis	
	° the clinical findings of pericardial effusion	
	° aortic dissection	
	Understand clinical features of ischaemic chest pain	
	 Understand indications for admission or outpatient follow-up. 	
	Understand the indications for various investigationsIdentify the most appropriate investigation/s and provide	
	appropriate treatment including:	
	• Use of troponin/other serum markers	
	 Interpretation of ECG findings of AMI 	
	° stress testing,	
	° echocardiography,	
	° angiography	
	 analgesia including GTN and narcotics 	
	° oxygen when indicated	
	 standard anticoagulation drugs including aspirin and LMW heparin 	
	 Treatment of STEMI by reperfusion including: 	
	° Fibrinolysis	
	 Referral for PTCA /stenting 	
	 Indications and dose of clopidogrel 	
	 Indications and use of glycoprotein 2b/3a inhibitors 	
	° Treatment of non-STEMI	
	 Aspirin and clopidogrel 	
	 LMW Heparin 	
	 B-Blockers 	
	 Referral for angiography 	

Element	Knowledge and skills	Procedures
	2. Acute cardiogenic pulmonary oedema	
	Demonstrate understanding of the common causes of acute	
	pulmonary oedema including	
	° ischaemic heart disease	
	• Discuss less common causes such as:	
	° acute mitral valve rupture	
	 Identify the most appropriate investigation/s and provide appropriate treatment including: 	
	ECG and CXR	
	 Nitrates (S/L, topical or IVI) 	
	ACE Inhibitors	
	• Frusemide	
	• Analgesia	
	Aspirin	
	 Ventilatory support both non-invasive and invasive 	
	Use of inotropes	
	3. Common arrhythmias	
	 Understand and identify common tachy- and bradyarrhythmias including 	
	° Sick sinus syndrome	
	 Tachy-bradycardia syndrome 	
	° Bundle branch blocks (right, left and hemiblocks)	
	 Heart block (1st, 2nd and 3rd degree) 	
	° Supraventricular tachycardia	
	Broad Complex tachycardia	
	Ventricular tachycardia	
	Ventricular fibrillation	
	Pre-excitation Syndromes	
	° Long QT Syndrome	
	Understand pharmacology and use of common anti- arrhythmic drugs	
	• Demonstrate familiarity with external pacemaker/defibrillator application and use	
	 Identify when to discontinue resuscitation 	
	 Identify the most appropriate investigation/s and provide appropriate treatment including 	
	 Common anti-arrhythmic drugs (e.g. amiodarone, sotalol, flecanide, digoxin, adenosine) 	
	 Vagal manoeuvres in supraventricular tachycardia's 	
Undertake history, examination, investigation and initiate treatment of patients	 Identify the underlying cause of shock including the distinguishing features of: 	Safely and appropriately carry out the following procedures:
presenting with complex	Hypovolemic shock	Central venous access
haemodynamic emergencies	Distributive shock	Arterial lines
	Obstructive shock Conditionary included	Rapid infusion (pump
	° Cardiogenic shock	giving sets, pressure
	 Demonstrate understanding of invasive haemodynamic monitoring. 	bags, blood warmer)
	 Demonstrate understanding of the Salinger technique for vascular access procedures. 	
	• Discuss risks associated with various anatomical sites of insertion.	
	 Recognise the indication for use of various blood products including: 	
	° O negative blood	
	 Massive transfusion 	

Element	Knowledge and skills	Procedures
	° Fresh frozen plasma (FFP)	
	° Platelets (Plat)	
	• Prothrombinex	
	 Identify the most appropriate investigation/s and provide appropriate treatment including: 	
	 Recognise the indication for use of various blood products including: 	
	 Fluid resuscitation 	
	° Use of blood products	
	° Inotropic support	
	 Coronary reperfusion for acute myocardial infarction 	
	 Central venous pressure and arterial blood pressure monitoring 	
	 Recognition and treatment of fluid overload 	
	 Recognition and management of hypertensive crisis 	
Undertake history,		Safely and appropriately
examination, investigation and initiate treatment of patients	 Demonstrate an understanding of Initial Management of Trauma consistent with Early Management of Severe Trauma (EMST) principles and building on skills gained in the EM 	carry out the following procedures:
presenting with complex trauma emergencies	Certificate.	• Insertion of intercostal
	 Obtain MIST history from the pre-hospital providers which also lidited by 	catheter
	should include:	 3 - 4 person log roll*
	 Mechanism and time of injury Minimize identified 	
	° Injuries identified	
	• Vital signs at scene and during transport	
	 Treatment before arrival at hospital 	
	 Undertake Primary Survey with attention to the management of: 	
	 Airway and Cervical spine 	
	 Breathing (chest injuries) 	
	 Circulation and haemorrhage control 	
	° Disability	
	° Exposure of the patient	
	° Discuss indications for intubation of trauma patients	
	 Understand appropriate administration of fluid/blood products including massive transfusion principles 	
	 Undertake a detailed secondary survey and identify further or occult injuries 	
	 Identify the underlying result of trauma including the distinguishing features of: 	
	 Head and facial injuries 	
	° Thoracic injury	
	° Abdominal injury	
	 Pelvic and lower limb injury 	
	° Spinal injury	
	 Demonstrate understanding of intracranial consequences and management of head injury including: 	
	 Extradural haemorrhage 	
	° Subdural haemorrhage	
	 Intracerebral haemorrhage 	
	 Subarachnoid haemorrhage 	
	° Haematoma	
	 Diffuse axonal injury 	
	 Minor head injury 	
	 Post-concussion syndrome 	
	Identify and manage potentially life-threatening facial injuries	
	 Identify life-threatening chest trauma including: 	
	 Tension pneumothorax 	

Element	Knowledge and skills	Procedures
	° Flail chest	
	° Massive haemothorax	
	° Open pneumothorax	
	° Cardiac tamponade	
	 Identify injury to vertebrae (fracture/dislocation and spinal cord) 	
	• Demonstrate understanding of:	
	 Spinal cord syndromes 	
	 Spinal cord and associated ligamentous injury without bony injury 	
	° Spinal cord assessment	
	° Examination of the spine (cervical, thoracic and lumbar)	
	° Spinal clearance (clinical and radiological)	
	° Including Indications for MRI scanning in trauma patients	
	 Undertake safe initial care of the potential spinally injured patient (spinal immobilisation) 	
	• Identify and manage the following injuries found on secondary survey:	
	° aortic injury	
	° diaphragmatic rupture,	
	° pulmonary contusion	
	° myocardial contusion	
	° oesophageal rupture	
	° tracheobronchial injury	
	 Penetrating truncal trauma 	
	 Vascular and acute limb threatening injury 	
	 Undertake examination of hip, pelvis and SI joints and identify and manage the following: 	
	° Pelvic fracture	
	° Sacral fracture	
	° Acetabular fracture	
	° Coccygeal fracture	
	 Identify and manage the traumatic abdominal injuries to solid organs and hollow viscera 	
	 Identify and manage pregnancy and trauma 	
	 Interpret trauma x-ray series 	
	 Demonstrate knowledge of Focused Assessment by Sonography for Trauma (FAST) examination. 	
	• Discuss indications for CT scan in trauma patients	
	 Demonstrate understanding of local or agreed protocols for admission of trauma patients under surgical teams 	
	 Identify process for stabilisation and transfer of patient for definitive investigation and management 	
	 Demonstrate understanding of: Thomas splint; Donway splint application; 	
	 Demonstrate understanding of preservation of severed body parts for re-implantation 	
Undertake history, examination, investigation and	 Identify the underlying cause of neurological emergency including the distinguishing features of: 	
initiate treatment of patients	° Headache	
presenting with <i>neurological</i> emergencies	 Stroke and transient ischaemic attacks 	
emergeneico	 Seizures/epilepsy 	
	 Altered conscious level 	
	 Syncope, vertigo and ataxia 	
	 Infections 	
	 Acute spinal cord lesions 	
	 Movement disorders 	

Element	Knowledge and skills	Procedures
	• Gait	
	 Parkinson's disease 	
	 Dystonia 	
	1. Headache	
	• Demonstrate knowledge of the different causes of headache	
	including distinguishing features of:	
	MigraineSubarachnoid haemorrhage	
	° Meningitis	
	° Encephalitis	
	° Temporal arteritis	
	° Hypertension	
	° Cerebral vessel dissection	
	° Sinusitis	
	° Tumour	
	° Glaucoma	
	° Dental	
	 Identify the most appropriate investigation/s and provide appropriate treatment including: 	
	° CT scan and interpretation	
	° Lumbar puncture	
	° Analgesia	
	° Referral if indicated	
	2. Stroke	
	 Discuss the distinguishing features of stroke including anatomical distribution and stroke syndromes e.g. MCA, PICA 	
	 Understand aetiology of stroke including: cerebral thrombosis, emboli and haemorrhage 	
	Identify transient ischaemic attacks	
	 Discuss indications for both neurological and neurosurgical consultation 	
	 Discuss the importance of early diagnosis and investigation of subarachnoid haemorrhage including CT scan and lumbar puncture 	
	 Identify the most appropriate investigation/s and provide appropriate treatment for all forms of stroke including: 	
	° Non-contrast CT brain	
	° MRI brain	
	° Lumbar puncture	
	Stroke team early interventionAppropriate analgesia	
	 Reperfusion strategy if appropriate 	
	3. Altered conscious level	
	 Identify the most appropriate investigation/s and provide 	
	appropriate treatment including:	
	 Use of the Glasgow Coma Score (GCS) TIPS AFIOH (Trauma infection psychiatric stroke alcohol) 	
	 TIPS AEIOU (Trauma, infection, psychiatric, stroke, alcohol, endocrine, insulin, hypoxia, uraemia) 	
	° Resuscitation with attention to airway and circulation	
	4. Syncope and vertigo	
	 Discuss the distinguishing features and difference between syncope and vertigo 	
	 Demonstrate understanding of the difference between central and peripheral vertigo 	

Element	Knowledge and skills	Procedures
	 Demonstrate the use of the Hallpike test for benign paroxysmal positional vertigo 	
	 Demonstrate an understanding of the risk stratification for syncope (CHESS - Chest pain, Haemoglobin, ECG, Short of breath, Systolic blood pressure) 	
	 Identify the criteria for admission for patients with either syncope or vertigo 	
	• Discuss the features of vertebrobasilar insufficiency	
	5. Seizures/ epilepsy	
	• Assess seizure status including airway control	
	Initiate control of seizure	
	 Demonstrate understanding and management of status epilepticus 	
	Identify causes of seizures including:	
	° Alcohol-related	
	° Drugs	
	° Post-traumatic	
	 Discuss indications for various investigations (CT, MRI) 	
	 Identify the most appropriate investigation/s and provide appropriate treatment for epilepsy including: 	
	 Airway management 	
	 Appropriate Ix including blood glucose 	
	 Appropriate Anti-epileptic pharmacological treatment CT scan 	
Undertake history, examination, investigation and	 Recognise the team and multidisciplinary nature of complex burn management. 	Safely and appropriately carry out the following
initiate treatment of patients presenting with <i>complex burns</i>	 Identify the distinguishing features of the following: 	procedures:
	° Chemical burns	 Burn/ first aid/ analgesia/ dressing
	° Electrical burns	 Fluid calculations
	° Sunburn	using the appropriate
	° Thermal burn	formulae for the burns fluid replacement for
	 Recognise special circumstances of some chemical burns e.g. hydrofluoric acid and hypocalcaemia 	both children and adults.
	 Recognise the risk of airway injury in some major burns patients and the need for early intubation. 	
	 Recognise the risk of associated phenomena e.g. inhaled toxins/gases 	
	• Recognise the risk of associated non-burn trauma.	
	 Understand the implications of complex burns for the calculation of fluid requirements. 	
	 Identify the most appropriate assessment and understand appropriate treatment for: 	
	° Airway management	
	° Respiratory Burns	
	 Fluid resuscitation 	
	° Associated intoxication e.g. carbon monoxide.	
	• Demonstrate knowledge of indications and pathways for referral to burns centres for management.	
	Manage a multidisciplinary clinical team	
	• Function as a team leader where necessary.	
	 Use appropriate communication tools for efficient consultation, referral and transport 	
	 Identify the most appropriate investigation/s and provide appropriate treatment including: 	
	 Use of appropriate tools for calculating burn surface area and adjust for complicating factors and age. 	

Element	Knowledge and skills	Procedures
	 Methods of analgesia e.g. Dressings, Cooling, Opiates, PCA, Ketamine 	
	 Appropriate prophylaxis measures for Peptic Ulcer and Tetanus 	
	° Knowledge of appropriate transport dressings for burns.	
	 Describe the indications and techniques for performing an escharotomy 	
Undertake history, examination, investigation and	 Undertake appropriate assessment for vascular, neurological or tendon injury. 	Safely and appropriately carry out the following
initiate treatment of patients presenting with <i>complex</i> wounds	• Identify the need for appropriate antibiotic cover, exploration and debridement in the Operating Theatre.	Procedures:Regional nerve blocks
	• Demonstrate knowledge of issues associated with concurrent complex wounds and fractures.	including femoral nerve block.
	• Discuss imaging modalities for foreign bodies.	 Incision and drainage of abscess
	• Demonstrate knowledge of complex wound contaminants (e.g. chemicals, coral, tropical, bites (human or animal).	Multi-layer wound closure
	• Demonstrate knowledge of unusual infections (e.g. salt water, fresh water, flooding.)	 Suture special wounds (e.g. lips)
	 Discuss appropriateness of different suturing materials and dressings 	
	 Identify the most appropriate treatment including: Surgical referral Imaging 	
	 Appropriate dressing/suturing 	
Undertake history, examination, investigation and	 Identify the underlying cause of ENT emergency including the distinguishing features of: 	Safely and appropriately carry out the following
initiate treatment of patients presenting with ENT	• Epistaxis,	procedures:
emergencies	• Quinsy	 Nasal local anaesthetic
	Nasal foreign bodies	Nasal packing
	Mastoiditis	Chemical cautery of
	• Ludwig's angina	epistaxis
	• Epiglottitis	
	Post-tonsillectomy bleed or infection	
	Dental emergencies	
	 Identify the most appropriate investigation/s for and provide appropriate treatment and referral including: 	
	 Packing of nose (anterior and posterior) 	
	 Removal of foreign bodies from ear and nose (including indications for removal under anaesthesia) 	
	• Silver nitrate cautery of anterior epistaxis	
Undertake history, examination, investigation and initiate treatment of patients presenting with complex ophthalmological emergencies	 Identify underlying cause of ophthalmological emergency including the distinguishing features of: 	
	° Hyphema	
	Corneal abrasions	
	 Keratitis Correct ulcorr 	
	 Corneal ulcers Ocular burns 	
	° Globe injury	
	 Muscle entrapment, 	
	° Optic nerve injury	
	° Lid margin laceration	
	 Lacrimal duct injuries 	
	° Sudden loss of vision	
	° Retinal detachment	

Element	Knowledge and skills	Procedures
	Vitreous haemorrhage	
	° Glaucoma	
	 Assess visual acuity and undertake ophthalmoscopy 	
	examination.	
	 Identify the most appropriate investigation/s and provide appropriate treatment including referral. 	
Undertake history, examination, investigation and initiate treatment of patients	• Identify the underlying cause of the environmental emergency including the distinguishing features of:	
presenting with environmental	° Electrical injury	
emergencies	° Immersion injury	
	° Hypothermia/Hyperthermia	
	° Hyperbaric injury	
	1. Electrical injury	
	 Identify the most appropriate assessment and provide appropriate treatment 	
	 Identify differences in injury pattern between AC and DC injury, household versus high voltages and lightning injuries 	
	These patterns include	
	° Arrhythmias	
	° Cardiac injury	
	° Neurological deficit	
	° Deep burns	
	 Compartment syndromes and rhabdomyolysis 	
	 High risk settings e.g. pregnancy. 	
	° Associated other injuries with mechanism eg trauma	
	2. Immersion injury	
	 Identify the most appropriate assessment and provide appropriate treatment for problems including 	
	 "dry' versus "wet" drowning 	
	° Hypothermia	
	 Acute Lung Injury 	
	° Arrhythmias	
	 Metabolic disturbance 	
	 Associated patterns of injury and presentation including trauma suicide and intoxication 	
	3. Hypothermia	
	 Identify the most appropriate assessment and provide appropriate treatment including: 	
	• Measurement and understanding of core temperature	
	° Classification of severity of hypothermia	
	 Minimise patient disturbance to avoid complications 	
	 Metabolic and Endocrine assessments 	
	 ECG findings 	
	 Passive and active Warming Techniques. 	
	 Rapid cooling via external and internal techniques. 	
	 Differentiation of "hypothermic" from "dead" 	
	4. Hyperthermia	
	 Identify the most appropriate assessment and provide appropriate treatment including: 	
	 Measurement and understanding of core temperatures Exclusion of sepsis 	
	 Exclusion of separation of sepa	
	and	

Element	Knowledge and skills	Procedures
	° endocrine disturbances eg thyroid storm	
	 Passive and active Warming Techniques 	
	 Rapid cooling via external and internal techniques. 	
	° Appropriate fluid management.	
	 Appropriate use of antidotes e.g. dantrolene. 	
	5. Hyperbaric injuries	
	 Identify the most appropriate assessment and provide 	
	appropriate treatment ° identify hyperbaric injuries and complications	
	 barotrauma including neurological, respiratory and joint manifestations 	
	° understand rationale for oxygen therapy	
	 know local and national referral patterns for hyperbaric related injury 	
Undertake history, examination, investigation and initiate treatment of patients	Identify those patients whose presentation is due to infectious disease.	Safely and appropriately carry out the following procedures:
presenting with infectious diseases	 Demonstrate knowledge of common infectious diseases, in particular those that are notifiable. 	• Suprapubic bladder
	 Identify those patients who are immunocompromised and have atypical presentation of infection 	aspiration • Ascitic tap
	• Demonstrate knowledge of appropriate prophylactic regimes e.g. contact tracing in meningococcus, Chlamydia etc.	 Joint aspiration Blood culture
	• Explain indications for cultures , microscopy, serology and PCR testing and interpret results of these investigations in the relevant clinical context	collection
	 Discuss appropriate use of Personal Protective Equipment for self and staff 	
	• Demonstrate appropriate counselling skills for patients diagnosed with or potentially having infectious diseases with social implications as well as mortality/morbidity implications.	
	 Recognise severe sepsis and demonstrate appropriate interventions 	
	 Identify the most appropriate investigation/s/assessment and provide appropriate treatment/referral including 	
	 supportive therapy 	
	° antibiotic therapy	
	 Infectious Disease consultation 	
Undertake history, examination, investigation and initiate treatment of patients	 Identify underlying cause of metabolic and endocrine emergency including the distinguishing features of: Diabetic ketoacidosis 	
presenting with <i>metabolic and endocrine</i> emergencies	 HHNK Syndrome 	
endocrine entergencies	 Hypoglycaemia 	
	° Hyperglycaemia	
	 Addisonian crisis 	
	 Thyrotoxicosis 	
	° Myxoedema Coma	
	° Renal/dialysis	
	 Acid based disturbances 	
	 Disturbance in sodium, potassium, calcium Paediatric inborn errors of metabolism 	
	• Identify the most appropriate investigation/s and commence	
	initial treatment of these emergencies including: Measurement of blood glucose, venous blood gas	
	 Fluid, insulin and potassium therapy 	
	 Administration of glucose and Glucagon 	
	 Blood gas interpretation 	
	 Emergency therapies for endocrine deficiency and excess 	

Element	Knowledge and skills	Procedures
	 Sodium and potassium derangements 	
	 Indications for urgent dialysis 	
	° Referral for complex paediatric metabolic derangement	
Undertake history, examination, investigation and	 Identify the underlying cause of emergency including the distinguishing features of: 	Safely and appropriately carry out the following
initiate treatment of patients	 Complex soft tissue injury including: 	procedures:
presenting with <i>musculoskeletal</i> emergencies	 crush injuries 	Perform 3 reductions
	 high pressure injection injuries 	of either limb fractures or major
	 Compartment syndrome 	joint Dislocation
	° Superficial and deep space hand infections	requiring treatment (adult or child)
	° Major joint dislocations	(adult of child)
	° Potential nerve and vascular complications of dislocations	
	 Identify the most appropriate investigation/s and provide appropriate treatment including: 	
	° Surgical referral	
	° Reduction	
	° Plaster	
	° Drainage	
Undertake history, examination, investigation and	 Identify the underlying cause of emergency including the distinguishing features of: 	Safely and appropriately carry out the following
initiate treatment of patients presenting with complex	° Pre-eclampsia / eclampsia	procedures:
obstetric and gynaecological	° PID	Simple palpation of
emergencies	° Ectopic pregnancy	the pregnant abdomen
	° Premature labour	
	° Trauma in pregnancy	
	 Post and ante-partum haemorrhage 	
	° Miscarriage	
	° Hyperemesis gravidarum	
	Describe the indications for CTG	
Safely and effectively administer <i>advanced pain</i> <i>relief</i> and procedural sedation	 Recognise the most appropriate method of pain relief for complex presentations. 	Safely and appropriately carry out the following procedures:
reliej allu procedural sedation	• Demonstrate advanced knowledge of the different methods of	F
	analgesia including:	Femoral nerve block
	Procedural sedation	 Procedural sedation including intravenous
	° Regional anaesthesia ° Chronic pain relief	sedation (adult or child – please also refer Injured Infant as only 1 DOPs required under this element or
		Injured Infant)
		 Intravenous analgesia
Undertake history, examination, investigation and	 Identify the underlying cause of emergency including the distinguishing features of: 	Safely and appropriately carry out the following
initiate treatment of patients	° Mood disorders	procedures:
presenting with <i>complex psychiatric</i> emergencies	 Depression 	Conduct a mini-mental
	 Bipolar disorder 	state examination
	° Thought disorder	
	 Psychosis – Acute/Chronic 	
	 Behavioural Presentations 	
	Primary psychiatric	
	 Suicide ideation 	
	Acute intoxication	
	Delirium Acquired brain injun/	
	Acquired brain injuryComplex persistent pain syndrome	
		1
	Personality disorders	

Element	Knowledge and skills	Procedures
	° Adolescent issues	
	 Body dysmorphic issues – anorexia/bulimia 	
	° Paediatric issues	
	° Drug and alcohol issues	
	 Acute – intoxication/withdrawal 	
	 Chronic – Alcohol/analgesia 	
	 Discuss the system for assessing all aspects of patient's mental health 	
	 Demonstrate knowledge of the local legal issues relating to psychiatric presentations. 	
	 Identify the most appropriate investigation/s and provide appropriate treatment including: 	
	° Diagnostic tests	
	° Referral	
	° Restraint	
	 Verbal 	
	Chemical	
	 Physical 	
	 Legal 	
	 Demonstrate knowledge of the following danger signs: 	
	 impending escalation of aggression which could place 	
Undertake biston	yourself and others in danger	Cofely and appropriately
Undertake history, examination, investigation and initiate treatment of patients	 Identify the underlying causes of emergency presentation including the distinguishing features of: 	Safely and appropriately carry out the following procedures:
presenting with advanced toxicological and toxinological	 Risk Assessment principles including agent, dose, time for ingestion, clinical features and patient factors. 	• Perform a risk
emergencies	 Toxidromes: anticholinergic, cholinergic (muscarinic and nicotinic), opioid, sympathomimetic, serotonergic and neuroleptic malignant syndrome, sedative/hypnotic, hypoglycaemia, salicylates, ethanol, sodium channel 	assessment of a poisoned patient Interpret ECG in a poisoned patient
	 blockade, spider and snakebite Antidotes and antivenoms: atropine, calcium, flumazenil, glucagon, N Acetyl cysteine, naloxone, octreotide, 	 Pressure immobilisation bandage
	physostigmine, pralidoxime, sodium Bicarbonate and Vitamin K.	 Splinting with PIB application
	 Methods to decontaminate and enhance elimination: ipecac, lavage and charcoal 	
	 Specific management of: Snake and spider bites, marine and arachnid envenomations relevant to local surrounds 	
Paediatric	 Identify the distinguishing features of the following: 	Safely and appropriately carry out the following
Undertake history,	 Airway and breathing problems in the newly born 	procedures:
examination, investigation and initiate treatment of the <i>newly</i>	 Circulation problems in the newly born (bradycardia, cyanosis and shock) 	CPR in the newly born
born baby (up to 4 hrs. old)	° Depressed muscle tone/movement in the newly born	 Airway and breathing support in the newly
	 Identify, order and interpret the most appropriate investigations and provide appropriate treatment including 	born, including airway suction and bag
	 Initiation of neonatal resuscitation 	ventilation
	 Investigation for newly born abnormalities during and immediately after resuscitation, including blood glucose and blood gas investigation, and CXR interpretation (heart and lung problems e.g. cardiomegaly, pneumothorax post resuscitation). 	 IV access in the newly born including IV cannulation and umbilical artery or vein catherisation
	 Choice of resuscitation fluid and drug administration, including calculation of doses/volume. Particularly concentrating on 0.9% saline, 10% dextrose, adrenaline and nalaxone administration 	
	 Post resuscitation care, including temperature control and nutritional/fluid support 	
	° APGAR score	
Undertake history,	 Identify the distinguishing features of the following: 	Safely and appropriately carry out the following

Element	Knowledge and skills	Procedures
infant (up to 2 years old) or	 Respiratory distress (upper and lower airway causes) 	 Bag ventilation,
child (above 2 years old)	 Circulation collapse, common arrhythmias and congenital heart disease. 	endotracheal intubation and initial
	 Septic Child (recognition assessment, investigation and treatment) 	ventilator settingsCirculation access and
	 Altered Level of Consciousness (including Afebrile Seizure, Hypoglycaemia) 	blood sampling including intraosseous access and arterial
	 Apparent Life Threatening Event 	blood sampling
	 Abdominal pain (organic and functional) 	 Defibrillation and
	° Trauma in Children	Cardioversion (electrical and
	° Child with a limp	chemical)
	° Feeding problems in the infant	Septic workup
	 Excessive crying in the infant 	procedures e.g. blood
	 Identify, order and interpret the most appropriate investigations and provide appropriate treatment including; 	culture or sterile urine collection
	° Oxygen therapy	
	 IV fluid therapy including type and rate 	
	 Paediatric radiology 	
	 Appropriate phlebotomy and pathology investigations (biochemistry, haematology, micro) 	
	° Urine collection	
	° CSF and joint fluid analysis	
	 Drug therapy including choice – including antibiotics and analgesics 	
	 Demonstrate knowledge of the following danger signs: 	
	° Cyanosis	
	 Decreased neurological responsiveness 	
	° Abnormal temperature	
	° Decreased oral intake or urine output	
	 Blood or Bile-stained vomitus 	
	 Projectile vomiting 	
	• Demonstrate effective communication with parent and patient of diagnostic and management plans	
Undertake history,	 Identify the distinguishing features of the following: 	Safely and appropriately
examination, investigation and initiate treatment of the	° Minor head injury	carry out the following procedures:
injured infant or child	° Soft tissue injury	 Procedural sedation
	 Limb injury with neurovascular compromise 	including intravenous
	 Identify and manage 	sedation* (adult or child – please also
	 Minor head trauma and concussion 	refer to Advance Pain
	 Common paediatric soft tissue injuries (simple 	Relief as only 1 DOPs
	lacerations) • Salter-Harris injuries	required under this element or Advance
	 Injuries to the carpal bone complex 	Pain Relief)
	 Open fractures 	
	 Identify, order and interpret the most appropriate investigations and provide appropriate treatment including 	
	 Analgesia 	
	 Radiology interpretation 	
	 Drug and IV fluid choice 	
	 Limb immobilisation techniques 	
	 Appropriate reduction of fracture/dislocation with neurovascular compromise 	
	 Observation in ED or short stay admission 	
	 Demonstrate effective communication with parent and patient re: follow up management plans (e.g. minor head injury) 	

Element	Knowledge	Skills/Procedures
 Initiate and participate in <i>quality</i> assurance and improvement activities. This includes: Delivering appropriate care Ensuring Patient Safety Critically evaluating own clinical practice and that of peers (e.g. by peer review / adverse event monitoring) Encouraging Improvement and Innovation in clinical practice 	 Methods of identification and quantification of risk to patients How to use a range of databases for system appraisal and monitoring The application of current quality improvement methodology to monitor processes and the effects of change. Leadership strategies to motivate for innovation Understand QI process: identification, change in practice and monitoring of effect 	 Use systematic ways of assessing and minimising risk Obtain and act on patient, carer and service user feedback and experiences Listen to others and recognise different perspectives Demonstrate reflective practice Demonstrate implementation of QI process
Demonstrate an understanding of <i>public health issues</i> and actively participate in health promotion at an individual patient and departmental level.	 Key issues and trends in community health including: Mandatory notification e.g. child abuse, elderly abuse, firearms, unfit to drive and drowning. Substance abuse Immunisation Community epidemics Infectious diseases control including notification, contact identification, tracing and prophylaxis (e.g. meningococcus) Domestic violence Health promotional strategies and interventions Injury surveillance and prevention Demonstrate an understanding of organ donation and transplantation protocols 	 Accurate detection and management in mandatory notification cases and infectious diseases. Safe and appropriate co- ordination of notification responses in required cases Can conduct health promotion interventions including the brief opportunistic intervention in ED. E.g. smoking cessation, alcohol and drug intake
Demonstrate an understanding of <i>disaster management</i> principles	 Describe the core principles of disaster management including : the comprehensive approach of prevention (mitigation), preparedness, response and recovery the 4 c's of command, control, coordination and communication the all agencies approach the all hazards approach the prepared community Identify the key implications of these principles for your hospital, your emergency department and your role in the ED Identify & familiarisation with your emergency department's disaster plan if available including: integration of this with rest of the hospital, the local and district disaster arrangements, state and national arrangements Training and resources required to support the plan 	 Involvement in disaster preparedness exercise such as desktop and simulation exercise Application of disaster triage Interagency communication (e.g. police, ambulance, government and department of health)
Demonstrate an understanding of <i>emergency health care</i> in the rural and remote context:	 the plan The differing spectrum of emergencies likely to be encountered The impact of rural and remote attitudes which may cause delays in presentation The impact of limited resource availability and the principles of improvisation and harnessing all available resources. Understanding of initial emergency stabilisation and time-critical care in non-hospital settings An understanding of telehealth and its application including an awareness of varying 	 Giving and receiving advice via phone, radio or internet Providing initial advice regarding stabilisation of a patient in a remote setting Initial coordination of local medical transport agencies with appropriate specialist involvement.

EMD02 Participate in advanced clinical support activities

Element	Knowledge	Skills/Procedures
	communication strategies (e.g. phone, radio and internet-based strategies), their limitations in certain areas and operating procedures governing use of some radio modalities.	
	 Awareness of innovation in care systems and technology and their applications to the rural/remote environment. 	
Demonstrate an understanding of indigenous health issues including Aboriginal, Torres Strait Islander and	 Understanding cultural issues and the concept of cultural competence as they impact on emergency medical care. 	 Appropriate communication with indigenous and other ethnically diverse patients
Maori health	 Indigenous attitudes, beliefs and customs relating to: 	 Appropriate and effective communication with
	• acute illness	Indigenous support workers in facilitating care for
	• injury and death	indigenous patients.
	medical treatment	
	 transportation and separation from family and local community 	
	 Patterns of acute illness and injury particular to indigenous populations 	
	• Barriers to health care for Indigenous patients	
	• Knowledge of indigenous specific programmes at a local and federal level.	
Demonstrate advanced knowledge and skills in coordination of	 Describe the process involved in pre-hospital response and management 	 Preparation of a patient transport bag
emergency retrieval and transportation	 Describe the steps in preparing a patient for transfer including 	 Able to safely use transport equipment
	 resuscitation and stabilisation 	
	 packaging' for safe transport 	
	 Knowledge of appropriate transport platforms and associated rationale 	
	• Familiarity with equipment, drugs and monitors required for safe transport	
Demonstrate the ability to <i>refer and</i> <i>transfer</i> patients requiring care beyond what is available locally	 Discuss the issues factors contributing to a safe referral and transfer process including: 	Complete required documentation for transfer of activate (including)
(either higher level care or breadth	Knowing own limitations	patients (including involuntary transport of
of resources)	 Knowing when, how and where to refer appropriately 	patients with acute psychosis)
	• Communicating effectively and appropriately with other specialist areas (e.g. surgery, ICU)	• Conduct safe and effective handover with the accepting/
	 Choice of best available transport method and associated rationale 	transfer team
	 Demonstrate an understanding of the safe and effective handover of patients: 	
	° Within the emergency department	
	° Within the hospital	
	 To other hospitals/facilities 	

EMD03 Demonstrate advanced professional, legal and ethical practice

Element	Knowledge	Skills/Procedures
Demonstrate a commitment to patients, profession and society through professional and ethical behaviour and practice.	 Know the national codes relating to good professional and ethical practice Conflict of interest Confidentiality Identify strengths and limitations in self and others; the impact of behaviour on others in the workplace; and the effect of stress on own behaviour Meet responsibilities and commitments to consistently high standards 	 Plan workload and activities to fulfil work requirements and commitments, without compromising own health Obtain, analyse and act on feedback from a variety of sources Demonstrate effective inter- professional behaviours.

Element	Knowledge	Skills/Procedures
	 Change behaviour in the light of feedback and reflection. 	 Take appropriate action if ethics and values are compromised
	 Uphold personal and professional ethics and values, taking into account the values of the organisation and respecting the culture, beliefs and abilities of individuals 	compromised
	 Value, respect and promote equality and diversity 	
Demonstrate advanced knowledge of legal practice & forensic medicine	 Demonstrate familiarity with the AMA Code of Conduct for Medical Practitioners 	 Write medico-legal reports when required
mearcine	 Identify the issues surrounding advanced directives and limits of resuscitation 	 Undertake sexual assault examination and specimen
	 Discuss the role of the Coroner and coronial and statutory reporting/investigations. 	collection
	 Demonstrate understanding of the clinical and medico-legal requirements for management of physical/sexual assault /non-accidental injury cases 	
	 Demonstrate knowledge of the treatment of minor and persons in custody 	
	 Demonstrate an understanding of the legal issues surrounding refusal of treatment against medical advice. 	
	 Demonstrate understanding of OHS legislation and requirements 	
	 Understand the application of duty of care principles 	
	 Manage behavioural disturbances in the emergency department 	
Demonstrate leadership and management skills	 Demonstrate an understanding of leadership skills and attributes 	 Demonstrate ability to manage and organise ED teams as required
	 Discuss the difference between leadership and management 	 Liaise effectively regarding inpatient coordination
	 Identify the process for complaints handling in the emergency department 	 Demonstrate the ability to take on leadership or
	 Identify the various clinical and non-clinical support tools which can be accessed in an emergency department. 	administration roles when appropriate
		 Handle complaints and refer as appropriate
		 Demonstrate competence in the use of electronic record systems and documentation
		 Demonstrate competence in the allocation of finite health resources
Demonstrate prioritisation and decision-making skills	 Discuss issues requiring complex decision making and prioritisation in ED including: Overcrowding in the ED Multiple critically ill patients 	 Demonstrate use of clinical reasoning to justify diagnostic decisions and management priorities
	 Recruitment / rostering Contingency planning 	 Demonstrate use of risk stratification methods to create a safe patient management plan
	 Prioritise tasks and resources according to local guidelines. 	 Demonstrate autonomous decision making when required
		 Demonstrate appropriate delegation of tasks
Demonstrate an ability to apply an evidence-based approach to emergency medicine practice	 Ability to access relevant evidence and articles to support clinical decision making 	 Demonstrate critical appraisal of available research as to whether it

Element	Knowledge	Skills/Procedures
	 Comment on conclusions drawn in clinical research and whether the research is appropriate to answer clinical questions (including appropriateness of statistical methods and strength of conclusions drawn) Identify the process of implementing knowledge into clinical practice 	adequately answers a clinical question
Demonstrate the ability to utilise advanced communication skills when dealing with patients and carers to ensure: candidates treat patients, carers and all staff politely and considerately, listening and respecting their views, giving them information in a way they can understand and respecting their involvement in health care delivery.	 Understanding effective strategies for communication in complex scenarios including: Psychiatric, sexual assault, domestic violence, end of life issues, disclosure, error or adverse events, adolescent and communication impaired patients The principles of using interpreter services and indigenous support workers. The principles of safely and effectively communicating with aggressive and other challenging patient scenarios The techniques of communicating with diverse cultural groups in highly stressful situations The principles of communicating effectively in conflict situations with carers and ancillary staff. 	 Demonstrate an ability to work and communicate effectively with diverse groups. Demonstrate an ability to work in a culturally competent way which shows respect for and understanding of diversity in the workplace. Demonstrate an ability to communicate effectively in a consultation in the areas of history taking, examination, assessment and transfer. Demonstrate responsible communication in its various forms; face-to-face, phone and email
Provide <i>effective supervision</i> and teaching to students, junior doctors and other staff (e.g. nursing and allied health) in the emergency department	 Discuss appropriate strategies for teaching in the emergency department that includes the fact that teaching in ED is integrated across all professional groups. Know the principles of providing effective feedback on clinical performance Understand different modes of teaching in the Emergency Department eg bedside, hand-over rounds and formal or didactic. Awareness of the tension between education and patient safety when supervising staff in the clinical environment 	 Demonstrate the ability to provide safe and effective supervision in the clinical environment including the ability to know when to intervene for patient safety and be able to give feedback. Demonstrate effective one on one teaching whilst working on the floor including teaching of skills / procedures and associated feedback on practice.