



Australasian College
for Emergency Medicine

Curricula

Emergency Medicine
Certificate
Diploma
Advanced Diploma

EMCD803

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1	Dec 2020	First release of revised EMC and EMD, and addition of EMAD curriculum.
1.1	Mar 2021	Addition of further Recommended Resources. Minor amendments to EMC and EMD curricula. Minor spelling and grammar throughout.
1.2	Aug 2021	Addition of IHCC module. Updates to terminology.

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1. Introduction

The Australasian College for Emergency Medicine (ACEM) is committed to the provision of the highest quality emergency care for all patients in Australia and Aotearoa New Zealand. This commitment acknowledges that medical practitioners who provide emergency care require the requisite clinical, academic, personal and professional attributes and expertise to deliver these services with confidence and to a high standard. As such, ACEM offers the Emergency Medicine Certificate (EMC), Emergency Medicine Diploma (EMD) and Emergency Medicine Advanced Diploma (EMAD) to those medical practitioners wishing to undertake a structured education and training program as part of the process of developing their clinical expertise and skills in emergency medicine, but do not wish to undertake the full requirements of a Fellowship in emergency medicine.

The original EMC and EMD programs underwent a significant review by a working group established by the ACEM Board, commencing in November 2018. The EMC/EMD Review Working Group comprised representatives from ACEM, the Rural Faculty of the Royal Australian College of General Practitioners (RFRACGP), the Australian College of Rural and Remote Medicine (ACRRM) and the Division of Rural Hospital Medicine (DRHM) of the Royal New Zealand College of General Practitioners (RNZCGP). The review was informed by ongoing monitoring and evaluation of the EMC and EMD training programs since their inception in 2011 (EMC) and 2012 (EMD). The revised EMC and EMD programs and the new EMAD program, which have been developed as a result of the review, have also included a period of formal consultation with internal and external stakeholders.

Thus, as well as ACEM monitoring and evaluation activities over time, the resultant revisions to the curricula for all three programs is based on a range of recommendations from relevant stakeholders regarding the alignment of the EMC and EMD with the current and near-future needs of the emergency medicine workforce, with a particular emphasis on the urban, regional and rural sectors of Australia and New Zealand.

Throughout the review there was consideration and appreciation from all participating specialist colleges regarding the evolution of rural generalism and the role of the EMD and EMAD specifically, in the education and training of rural generalists in advanced skills in emergency medicine. Overall, the revised EMC and EMD and the newly created EMAD endeavour to ensure integrity and rigour in training and assessment and in the support for the learning and development of medical practitioners working in emergency departments across all jurisdictions in Australia and Aotearoa New Zealand.

The three-tier nested structure of the Emergency Medicine training programs is reflective of the progressive increase in knowledge and skills required for decision-makers of increasing seniority. These decision-makers fill many important roles within the emergency care system.

This document is intended to be read in conjunction with the *Emergency Medicine Certificate and Diploma Training Handbook* and the *Emergency Medicine Certificate and Diploma Primary Supervisor Handbook*.

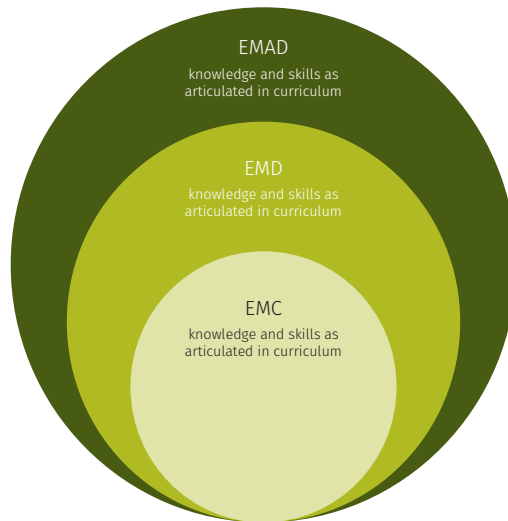
The training handbook can be found [here](#).

2. Structure of programs

2.1 The three-tiered nested structure

The structure of the training programs follows a three-tiered format, with the Emergency Medicine Certificate (EMC), Emergency Medicine Diploma (EMD) and the new Emergency Medicine Advanced Diploma (EMAD) as *nested* curricula; that is, the knowledge and skills of the three programs progressively build upon each other from one training program to the next.

Figure 1. The three-tiered nested structure of the EMC, EMD and EMAD training programs



The three-tiered nested structure of the curricula facilitates the flexibility and accessibility of the training programs. The structure is reflective of the progressive increase in knowledge and skills required and the shift toward independent practice as trainees continue from one training program to the next. For example, a trainee may complete the EMC and, at a later date, undertake the EMD without having to repeat the training and assessment requirements of the EMC. Similarly, trainees who have not undertaken the EMC previously but wish to practise at the level of a Diplomate may undertake the EMC and EMD concurrently. Thus, they would be required to complete both the EMC and EMD training and assessment requirements, which may be done sequentially or concurrently. Those wishing to practise at the level of an Advanced Diplomate would be required to complete the training and assessment requirements of the EMC, EMD and EMAD. These may be done sequentially or concurrently.

The EMAD is designed to allow for the upskilling of doctors to be senior decision makers in an ED, and participate in education and management responsibilities in a small ED site; this may include taking up opportunities to be a director in a small emergency department. In doing so, the EMAD will, in part, help address the need for doctors with ED management and leadership experience, to undertake such roles in emergency departments in rural and remote areas of Australia and Aotearoa New Zealand

2.2 Scopes of practice

The three-tier nested structure of the training programs is reflective of the progressive increase in knowledge and skills required for decision-makers of increasing seniority. These decision-makers fill many important roles within the emergency care system. Each of the training programs provide an opportunity for doctors working in emergency medicine departments to improve their emergency medicine knowledge and skills.

Emergency Medicine Certificate (EMC)

The EMC is a training program that would be beneficial for all doctors. This program is suited to, and intended for, doctors who will work:

- in an emergency department with access to off-site advice and rapid access to on-site critical care support; or
- as part of the team in an emergency department with senior assistance available on the floor when needed.

At the completion of training, EMC doctors will have the knowledge and skills to manage and treat patients with common emergency presentations. EMC doctors will also have basic knowledge and skills relating to:

- prioritisation;
- risk management;
- detecting red flags of serious illness;
- carrying out an initial focused assessment of an undifferentiated patient; and
- delivering safe patient care in a modern emergency care system.

Emergency Medicine Diploma (EMD)

The EMD is a training program that builds upon the knowledge and skills gained during the EMC. This program is suited to and intended for doctors who will work:

- in an emergency department with access to offsite support, but without rapid access to onsite critical care support; or
- as part of the team in an emergency department where they are a senior decision maker (SDM).

At the completion of training EMD doctors will have the knowledge and skills to independently manage and treat a range of higher complexity emergency presentations. In addition to those of the EMC, they will also have the fundamental knowledge and skills necessary to:

- stabilise critically ill and injured patients;
- provide safe sedation for emergency procedures.

EMD doctors will also have the knowledge, skills, and attributes to communicate and collaborate effectively with patients and families from different cultures, members of their local healthcare team, and clinicians from other services.

Emergency Medicine Advanced Diploma (EMAD)

The EMAD is a training program that builds upon the knowledge and skills gained during the EMD. This program is suited to and intended for doctors who will be:

- providing clinical support to EMC and EMD qualified doctors and as a director of a smaller emergency department (not accredited for FACEM training); or
- working in an emergency department as a senior decision maker with the ability to be a part of the education and management team.

At the completion of training, EMAD doctors will have the knowledge and skills to independently manage and treat a wider variety of and higher complexity emergency presentations, with telephone support from emergency specialists within the ED network, when required. In addition to those of the EMC and EMD, EMAD doctors will also have the knowledge and skills to:

- use ultrasound as appropriate;
- use a wider variety of resuscitative and other emergency techniques;
- improve their practice, the practice of junior team members, and the practice of emergency medicine in their environment.

The EMAD training program provides the skills for a medical officer to work as the senior decision maker, provide critical care support and be a director of a smaller Emergency Department. In larger Emergency Departments (accredited by ACEM for fellowship training) ,doctors who have successfully completed the EMAD training program will be equipped to work as a senior decision maker at middle grade (registrar) level.

2.3 Units of the training programs

Each of the training programs is structured around three Units as outlined in the table below. Within each of the Units of the training programs are a series of themes. Each of these are articulated in the individual curricula. The individual learning objectives for the training programs are then organised within these themes.

Certificate		
Unit 1	Fundamental principles of emergency medicine	The practice of emergency medicine is underpinned by the principles of prioritisation, risk management and the ability to detect red flags of serious illness. On completion of Unit 1, the trainee will have acquired basic knowledge and skills in carrying out an initial focused assessment of an undifferentiated patient.
Unit 2	Managing emergency presentations 1	Emergency clinicians manage a wide range of patient presentation types in a time-pressured environment. On completion of Unit 2, the trainee will have acquired the knowledge and skills to manage and treat patients with common emergency presentations.
Unit 3	Understanding the emergency care environment	The practice of emergency medicine involves collaborating with people and organisations within the hospital and wider community. On completion of Unit 3, the trainee will have acquired basic knowledge and skills to deliver safe patient care in a modern emergency care system.
Diploma		
Unit 1	Critical care in emergency medicine	Critically unwell patients can present to any emergency department at any time. On the completion of Unit 1, the trainee will have acquired the fundamental knowledge and skills to stabilise critically ill and injured patients, as well as provide safe sedation for emergency procedures.
Unit 2	Managing emergency presentations 2	As clinicians increase in seniority, they must manage presentations that are less common and more complex. On completion of Unit 2, the trainee will have acquired the knowledge and skills to independently manage and treat a range of higher complexity emergency presentations.
Unit 3	Professional practice in the emergency care environment	An emergency medicine professional develops approaches that improve the care their patient receives from the emergency care system. On completion of Unit 3, the trainee will have acquired the knowledge, skills, and attributes to communicate and collaborate effectively with patients and families/whanau from different cultures, members of their local healthcare team, and clinicians from other services
Advanced Diploma		
Unit 1	Advanced techniques in emergency medicine	Emergency medicine is constantly changing as new modalities become available. On completion of Unit 1, the trainee will have the knowledge and skills to use diagnostic ultrasound and a wider variety of resuscitative and other emergency techniques.
Unit 2	Managing emergency presentations 3	As clinicians increase in seniority, they must manage presentations that are rarer and increasingly complex. On completion of Unit 2, the trainee will have acquired the knowledge and skills to independently manage and treat a wider variety of higher complexity emergency presentations.
Unit 3	Professional leadership in the emergency care environment	A reflective practitioner must maintain clinical abilities and incorporate innovations over a lifetime. On completion of Unit 3, the trainee will have acquired knowledge, skills and attributes to improve their practice, the practice of junior team members, and the practice of emergency medicine in their environment.

3. Training and assessment requirements

3.1 Summary of Training and Assessment Requirements

The training and assessment requirements for trainees undertaking the EMD or EMAD vary depending on the entry pathway. Trainees should refer to the [Training Handbook](#) for further details regarding entry pathways.

Entry pathway	EMC	EMD	EMAD
1	Must complete all training and assessment requirements of the EMC (6 FTE months)	Must complete all training and assessment requirements of the EMC and EMD (12 FTE months)	Must complete all training and assessment requirements of the EMC, EMD and EMAD (18 FTE months)
2		Must complete all training and assessment requirements of the EMD (6 FTE months)	Must complete all training and assessment requirements of the EMD and EMAD (12 FTE months)
3			Must complete all training and assessment requirements of the EMAD (6 FTE months)

3.3 Assessments

Unit	EMC	EMD	EMAD
Meetings with Primary Supervisor	Start of placement meeting Reflection meetings every three calendar months	Start of placement meeting Reflection meetings every three calendar months	Start of placement meeting Reflection meetings every three calendar months
Workplace based Assessments (WBAs)	Five Mini-CEX <ul style="list-style-type: none"> + Paediatric + Trauma with primary survey + Chest pain presentation + Abdominal pain presentation + Mental state examination Six DOPS <ul style="list-style-type: none"> + Suture wound + Bag valve mask + Safe Defibrillation + C-spine manoeuvre, including 3-person log roll + Plaster upper limb + Plaster lower limb Two CbD	Five Mini-CEX <ul style="list-style-type: none"> + Obstetrics and Gynaecological + Multi-trauma + Neurology + Toxicology + Renal / endocrine / metabolic Five DOPS <ul style="list-style-type: none"> + Non-invasive ventilation + Procedural sedation + Lumbar puncture + Rapid sequence induction (RSI) plus ventilator set up + Joint or fracture reduction – major/ extremity Two CbD , of which one must be paediatric (either Mini-CEX or CbD)	Three Mini-CEX <ul style="list-style-type: none"> + high complexity presentations relating to the themes of the EMC, EMD or EMAD as measured using a complexity calculator Three DOPS <ul style="list-style-type: none"> + Ventilator- assessment, adjustment and troubleshooting (e.g. alarms) + US guided peripheral vascular access + Central venous access One Quality Improvement Activity M&M meeting presentation or Audit or clinical pathway/guideline/policy update or development One Direct observation of communication skills (DOCS) Two Clinical lead shift reports (CLSR)
Procedural checklist	Procedures as specified for EMC	Procedures as specified for EMD	Procedures as specified for EMAD
Examinations	Multiple choice examination (MCQ)	Multiple choice examination (MCQ)	Multiple choice examination (MCQ)

3.4 Workshops

The required workshop for the **EMC** is:

- + Advanced Life Support (ALS) Level 2, or an equivalent workshop for trainees based in Aotearoa New Zealand.

The required workshops for the **EMD** are:

- + Advanced Paediatric Life Support (APLS); and
- + Early Management of Severe Trauma (EMST) or Emergency Trauma Management (ETM).

The required workshops for the **EMAD** are:

- + Ultrasound workshop relevant to the curriculum; and
- + ACEM EMCD Supervisor Course.

3.5 Online learning module requirement

The *Indigenous Health and Cultural Competency Modules* are a requirement for all trainees. Other eLearning Modules included in the Learning Support Resources are highly recommended. The *Indigenous Health and Cultural Competency Modules* are as follows:

1. Introduction to Culturally Competent Care in the ED
2. Culturally Competent Communication in the ED
3. Understanding Health Literacy and Diversity of Health Beliefs
4. Understanding Language Diversity and Working with Interpreters
5. Improving ED Access and Experiences for Aboriginal and Torres Strait Islander Patients
6. Collaborative Practice: Understanding the Role of Aboriginal Liaison Officers and Families in ED care
7. Culturally Competent Discharge Planning
8. Culturally Competent End of Life Care
9. A Culturally Competent Approach to Challenging Presentations: Aboriginal and Torres Strait Islander Patients
10. A Culturally Competent Approach to Challenging Presentations: Refugee and Migrant Patient
11. Māori and Pacific Island Health

4. Teaching and learning strategies

The curricula of the three programs are designed to provide comprehensive learning programs relevant to doctors providing emergency medical care across a diversity of cultural and Indigenous populations. Each builds upon pre-existing knowledge and skills to enhance the expertise of the emergency medicine professional.

Cognisant of the variety of doctors who may undertake the EMC, EMD and EMAD training programs and the range of expertise they will bring to their training experience, the training programs recognise them as adult learners who:

- + possess a considerable store of knowledge, skills and attitudes that influence their learning experiences;
- + are motivated by their need to develop professional expertise; and
- + learn most effectively when new experiences are integrated into their everyday professional practice.

4.1 Learning support resources (LSR)

The ACEM Education Resources website provides trainees with readily accessible learning support resources, including bespoke self contained e-learning modules (eLMs), details of recommended chapters in the recommended textbooks and other useful resources. These resources are mapped to the learning outcomes articulated in the three curricula and can be accessed at the doctor's own pace according to their individual needs. The resources are designed to support those undertaking the programs, their supervisors, while serving as a highly valuable point of reference for knowledge acquisition, consolidation and appraisal, and preparation for assessment.

4.2 Supervised training (ST)

Supervised Training (ST) follows an apprenticeship model of learning, whereby those enrolled in the programs develop the requisite knowledge and skills during their everyday work with the guidance and support of a supervisor.

4.3 Self-directed learning (SDL)

In line with adult learning principles, doctors enrolled in the programs are encouraged to undertake self-directed learning to ensure their individual learning and development needs are met. They take responsibility for their own learning by determining their needs, setting goals, identifying resources, implementing a plan to meet their goals, and evaluating the outcomes. Self-directed learning encompasses independent activities, including researching online or in recommended texts and journals, and those activities that require communication with supervisors, experts, and peers who guide and support trainees, helping them recognise their growth and areas requiring further development.

4.4 Workshops (WS)

Each of the training programs have workshops that are required to be completed. These workshops are intended to increase the trainee's knowledge and skills in emergency medicine practice and support learning objectives of the curriculum.

5. Assessment methods

For the details on who can assess each of the following, please see each of the Approved Assessor Matrix in the [Training Handbook](#).

5.1 Meetings with Primary Supervisor

Start of placement meeting (SPM)

A *Start of Placement meeting* is to take place at the beginning of each training placement and is an important opportunity for the trainee to meet with their Primary Supervisor and establish their learning intentions and goals for training.

Reflection meeting (RM)

A *Reflection Meeting* is an opportunity for trainees to reflect on their training, learning and performance, gain formative feedback from their supervisor and establish further learning goals. Reflection meetings are conducted at the end of every three calendar months of training during the minimum training period for the training program and at the end of each of the contributing placements.

5.2 Workplace-based Assessments (WBA)

Every shift in an ED provides encounters that offer many rich learning experiences that may contribute to valid assessment opportunities. The purpose of *Workplace-based Assessments* (WBAs) is to assess trainees, whenever possible, at the time of performing tasks, in real patient scenarios during normal daily work. When a trainee is involved in a clinical encounter or performing a procedure that may be assessed, an assessor utilises the relevant tool to assess the trainee's performance against each criterion. The EMC, EMD and EMAD Training Programs each comprise a suite of WBAs, as detailed in the curricula, including:

Mini-Clinical Evaluation Exercise (mini-CEX)

Mini-Clinical Evaluation Exercise (mini-CEX) involves a trainee being directly observed and assessed by an approved assessor whilst performing a focused clinical task during a specific patient encounter, including; History taking, examination, clinical synthesis (in relation to prioritisation, investigations, diagnosis and management plans) communication, professionalism and organisation and efficiency. For the Emergency Medicine Certificate and the Emergency Medicine Diploma the type of presentations required for mini-CEX are specified.

Direct Observation of Procedural Skills (DOPS)

Direct Observation of Procedural Skills (DOPS) are integral to the practice of Emergency Medicine. In these tasks a trainee is observed by an approved assessor whilst performing a specific clinical procedure. Trainees are assessed and receive feedback on their performance, from the technical part of performing the procedure to post-procedure management and discharge advice. For all training programs the procedures required for DOPS are specified. *For any DOPS where the assessor is a registered medical specialist whose areas of specialty relates to the applicable area of clinical practice, the Primary Supervisor must also approve the completed assessment.*

Case-based Discussion (CbD)

Case-based Discussion (CbD) is conducted between the trainee and the approved assessor after the clinical encounter has taken place. The approved assessor selects from three sets of case notes presented by the trainee and provides ratings and feedback based on the trainee's assessment, management, clinical reasoning and decision making, and accuracy of documentation on one of those cases. The trainee is also assessed on their reflection of the selected case during a discussion with the approved assessor.

Clinical Lead Shift Reports (CLSR)

A *Clinical Lead Shift Report* (CLSR) involves an approved assessor for the task assessing the trainee and providing structured feedback on the trainee's performance during a specific shift where the trainee is the clinical lead, based on direct observations. In order to ensure a complete assessment, the assessor also seeks feedback about the trainee's performance from other ED and non-ED staff (doctors, nurses, administration and support staff) with whom the trainee has interacted with during the shift. Trainees are assessed on criteria including Leadership,

prioritisation and safe decision making, communication and, where applicable, on emergency health care in a rural and remote setting, patient care including transfer and retrieval, and teaching on the run.

Direct Observation of Communication Skills (DOCS)

A *Direct Observation of Communication Skills (DOCS)* is an assessment designed to provide feedback to the trainee on essential communication skills pertaining to the clinical handover and/or referral of a patient. Trainees carry out a patient referral and are assessed by an approved assessor for the task who observes the process. Trainees are assessed on criteria, which include outlining identifying details, details of the situation, providing background of the presentation, assessment of the current clinical state of the patient, recommendations and readback and communication and consultation with staff.

Morbidity and Mortality (M&M) Meeting Presentations

Morbidity and Mortality (M&M) Meeting Presentations provide an opportunity for discussion about adverse outcomes. As well as being an important education process, they are also designed to lead to improvements in patient care and safety and improved patient outcomes. The M&M meeting presentation requires the trainee to prepare and present at the meeting, including providing a case summary, outcomes, contributing factors, recommendations, and the integration of evidenced-based literature. The task is assessed by an approved assessor.

Clinical pathway/ guideline / policy update or development

A Clinical pathway, guideline or policy update or development task provides the trainee with an opportunity to demonstrate their capacity for reviewing a clinical pathway/ guideline or policy and adapting this to their organisation/department. It is assessed by an approved assessor.

Audit

An Audit assessment task allows the trainee to learn the process of conducting a clinical audit and to analyse a relevant issue as part of an audit of the Emergency Department. Trainees are assessed on their performance in relation to elements of the audit cycle, including preparation, selection of audit criteria, measurement of performance, plan for improvements and sustainability of improvements. It is assessed by an approved assessor.

5.3 Procedural checklist

For each program there is a list of procedures a trainee must be observed to competently perform. Procedures are specified as to the number that must be performed in simulation and in a real patient. Performance of these procedures are to be recorded in a logbook and signed-off by an approved assessor for the task. The Primary Supervisor must sign off on the completed procedural checklist.

Trainees are expected to carry out procedures in the emergency department. For details on completion of procedural checklist items outside of the emergency department, refer to the [Training Handbooks](#).

5.4 Examinations

For each training program there is a multiple-choice question (MCQ) examination. Questions on the examinations align to the curriculum learning objectives. Details on eligibility to undertake the examinations are outlined in the [Training Handbooks](#).

To facilitate learning and to prepare for examinations, it is expected that trainees utilise a variety of resources in addition to the online elearning modules. For each training program, there are recommended texts and additional resources specified for each theme, details of which may be found on the ACEM Educational Resources website.

6. Procedural skills checklist

The following table lists the minimum number of procedural skills for each training program to be performed by a trainee and 'signed-off' by an approved assessor. The Primary Supervisor must sign off the completed procedural skills checklist. The number in brackets indicates the minimum to be performed on a real patient. For example '4 (1)' indicates a **minimum** of four procedures, of which **at least** one of the four must be performed on a real patient. The remainder may be performed as a simulation. In the case of '1 (1)', the trainee must perform a **minimum of one** procedure, and this procedure **must be** performed on a real patient. Where the procedure is also a DOPS*, the number indicated to be done in a real patient includes that which is done as a DOPS*.

	EMC	No.	EMD	No.	EMAD	No.
Resus	Insert oropharyngeal airway	1 (1)	Emergency intubation (e.g., RSI)	5 (3)	Complex RSI (adult)	2 (2)
	Insert nasopharyngeal airway	1 (1)	Other endotracheal intubation (insertion of ETT)	10 (10)	Emergency intubation (e.g., RSI)	5 (2)
	Insert laryngeal mask	1	Other airway procedures (either Insertion of laryngeal mask or endotracheal intubations)	10 (10)	Endotracheal intubation (insertion of oral ETT) with c-spine immobilisation	5 (2)
	Basic airway manoeuvres	2 (2)	Set up a ventilator for an adult in the ED	5 (1)	Use of bougie	2 (1)
	Use bag valve mask* (both one and two handed)	2 (1) adult (1) paed	Non-invasive ventilation including BiPAP and CPAP	4 (1)	Other endotracheal intubation (insertion of ETT)	10
			Insertion of intercostal catheter	1	CICO or eFONA	1
			RSI plus set up ventilator*	1 (1)	Other airway procedures (either Insertion of laryngeal mask or endotracheal intubations)	10 (10)
				Set up a ventilator, including adjustments and troubleshooting (e.g. alarms) for an adult*	5 (1)	
				Insert intercostal catheter	(1)	
Analgesia / pain relief	Intranasal analgesia (adult or paediatric)	1 (1)	Procedural sedation*	2 (1) adult (1) paed		
	Digital nerve block	1 (1)	Femoral nerve block / fascia ilaca block	2 (1)		
	Infiltration of local anaesthetic	1 (1)				
Musculo-skeletal	Plaster upper limb*	1 (1)	Fracture or joint reduction* (major/extremity)	1 (1)		
	Plaster lower limb*	1 (1)				

Procedural skills checklist (continued)

	EMC	No.	EMD	No.	EMAD	No.
Trauma	Pelvic splinting / binder	1	Chest decompression	1	Management of complex trauma special sub-populations in two out of the following three: + Geriatric + Paediatric + Pregnant	2 (2)
	Close wound with tissue adhesive	1 (1)				
	Suture wound*	1 (1)				
	C spine manouver*, including 3-person log roll	1 (1)				
Burns	Assess burn (size and depth)	1 (1)			Fluid calculations and replacement	2 (1) adult (1) paed
Wounds	Incision and drainage of abscess	1 (1)			Manage complex wound	1 (1)
Cardiac	Safe defibrillation* (adult or paediatric)	1	Application of external pacemaker	1		
			Cardioversion	1		
Circulation	IV access - Large bore (16G or larger)	1 (1)	Arterial line insertion	1 (1)	Central venous access*	3 (1)
	Intraosseous access	1	Insertion of Rapid infusion catheter (RIC)	1		
Neurology	Mini-mental state examination	1 (1)	Lumbar puncture*	1 (1)		
Psychiatric/mental health			Manage acutely behaviourally disturbed patient	1 (1)		
Infectious disease			Joint aspiration	1 (1)		
Ultrasound					eFAST or AAA	1 (1)
					US guided peripheral vascular access*	1 (1)
Gastro-intestinal	Insertion of nasogastric tube	1 (1)				

Procedural skills checklist (continued)

	EMC	No.	EMD	No.	EMAD	No.
Paediatrics	Appropriate basic airway techniques (on an infant)	1	Neonate resuscitation	1	RSI in a child	1
	Assess hydration	1 (1)	CPR in the newly born	1		
	Teach use of spacer	1 (1)	Neonate airway management, including use of: + airway suction + Bag ventilation + CPAP device	1		
			Bag ventilation	4 (1)		
			Endotracheal intubation	5		
			Set up ventilator using initial settings	2		
			Septic screening procedure	1 (1)		
			Laryngeal mask	2		
Obstetrics and gynaecological	Speculum vaginal examination and visualisation of the cervical os	1 (1)				
	Assess foetal heartbeat in late pregnancy (foetal doppler)	1 (1)				
Toxicology and toxicology	Pressure bandage with immobilisation (PBI)	1	Interpret ECG in a poisoned patient	1 (1)		
ENT			Nasal packing	1 (1)		
			Chemical cautery of epistaxis	1 (1)		
Ophthalmological	Removal of foreign body from eye	1 (1)				
Other	Insertion of urinary catheter	2 (1) male (1) female				

7. Recommended resources

As part of self-directed learning, trainees should access recommended texts and other resources to facilitate the development of their knowledge and skills to apply to daily practice and in preparation for assessments. No single text or resource addresses the entire knowledge base required for the practice of Emergency Medicine. The most recent edition of the following texts should be used. If the most recent edition has been available for less than 12 months, the previous edition may also be used.

To facilitate learning and to prepare for assessments, including examinations, it is expected that trainees utilise a variety of resources in addition to the online modules. For each training program, there are recommended texts and additional resources specified for each theme, details of which may be found on the ACEM Educational Resources website. The examinations aligns to the learning objectives of the curricula.

7.1 Training Handbooks

- + [Emergency Medicine Certificate and Diploma Training Handbook](#)
- + *Emergency Medicine Certificate and Diploma Primary Supervisor Handbook*

7.2 Recommended texts

EMC, EMD and EMAD

- + Cameron P, Little M, Mitra B, Deasy C. (eds) *Textbook of Adult Emergency Medicine*. Elsevier
- + Dunn RJ, Borland M, O'Brien D. *The Emergency Medicine Manual*. Venom Publishing.
- + Murray L, Little M, O. Pascu, Hoggett KA. *Toxicology Handbook*. Elsevier.

Additional texts for EMC only

- + Schaide JJ, Hayden SR, Wolfe RE, Barkin R, P Shayne P, Rosen P. *Rosen & Barkin's 5-Minute Emergency Medicine Consult*. Lippincott Williams & Wilkins
- + Hoffman RJ, Wang VJ, Scarfone RJ (eds) *Fleisher and Ludwig's 5 Minute Pediatric Emergency Medicine Consult*. Lippincott Williams & Wilkins.

7.3 Recommended ACEM Policies and Publications

ACEM-endorsed standards, statement, policies and guidelines align with at least one of the three entrustable areas of emergency medicine practice: patient care, departmental function, and career longevity. These documents are available on the ACEM website (acem.org.au/SearchPages/Policy-And-Regulation-Search) and include, but are not limited to, the following:

- + *P51 Care of older persons in the emergency department*
- + *P44 Provision of emergency medical telephone advice to the general public*
- + *P181 Provision of emergency medical telephone support to other health professionals*
- + *G26 Reducing the spread of communicable infectious disease in the emergency department*
- + *G125 Pathology Testing in the Emergency Department*
- + *G126 Guidelines on diagnostic imaging*
- + [Te Rautaki Manaaki Mana: Excellence in Emergency Care for Māori](#)
- + [ACEM Innovate Reconciliation Action Plan](#)
- + [P28 - Policy on quality framework in emergency departments](#)

7.4 ACEM Educational Resources

Trainees are encouraged to review the resources available on the ACEM Educational Resources website: elearning.acem.org.au/

Emergency Medicine Certificate

EMC Key

Abbreviation	Meaning
ST	Supervised training
LSR	Learning Support Resource
WS	Workshops
SDR	Self-Directed Learning
PC	Procedural Checklist
SPM	Start of Placement Meeting
RM	Reflection Meeting
Exam	Online MCQ examination
WBAs	Workplace-based Assessments
Mini-CEX	Mini-Clinical Evaluation Exercise
CbD	Case-based Discussion
DOPS	Direct Observation of Procedural Skills

EMC Units, teaching and learning strategies, and assessment

Unit	Teaching and learning strategies	Assessment methodologies
Unit 1 Fundamental principles of emergency medicine	+ ST + LSR + WS + SDL	+ Mini-CEX + CbD + DOPS + PC + SPM + RM + Exam
Unit 2 Managing emergency presentations 1	+ ST + LSR + WS + SDL	+ Mini-CEX + CbD + DOPS + PC + Exam
Unit 3 Understanding the emergency care environment	+ ST + LSR + SDL	+ Mini-CEX + CbD + DOPS + PC + SPM + RM + Exam

EMC Workshops

Trainees are required to complete the Advanced Life Support (ALS) Level 2, or an equivalent workshop for trainees based in New Zealand.

eLearning Modules

The Indigenous Health and Cultural Competency Modules are required for all trainees. Other eLearning Modules included in the Learning Support Resources are highly recommended.

EMC Units and themes

Unit	Themes
Unit 1 Fundamental principles of emergency medicine	<ul style="list-style-type: none"> + Principles of emergency medicine + Prioritisation in clinical practice + Clinical risk management and safe decision making + Procedure in Emergency Medicine + Resuscitation medicine 1 + Pain management + Vulnerable and high-risk patients
Unit 2 Managing emergency presentations 1	<ul style="list-style-type: none"> + Trauma + Limb + Burns and Skin/ soft tissue + Chest pain + Respiratory + Collapse/syncope + Neurological + Altered levels of consciousness/ confusion + Psychiatric and mental health + Geriatric + Paediatric + Abdominal/pelvic pain + Obstetrics + Gastrointestinal + Toxicological + Ophthalmological
Unit 3 Understanding the emergency care environment	<ul style="list-style-type: none"> + Legal issues and forensic medicine + Pre-hospital care, retrieval, admission, transfer and discharge + Teamwork in the ED environment + Personal health and wellbeing + Public health + Communication + Indigenous health and cultural competence + Rural and remote emergency medicine 1

EMC Assessment Methods

Tool	What is assessed?	Methodology
Mini-CEX	<p>History taking, examination, clinical synthesis communication, professionalism, organisation and efficiency based on each of the following:</p> <ul style="list-style-type: none"> + Paediatric + Trauma with primary survey + Chest pain presentation + Abdominal pain presentation + Mental state examination 	Five 15 to 20-minute Mini-CEX observed and assessed by an approved assessor*.
CbD	<p>The case should relate to the EMC curriculum and can be low complexity.</p> <p>Assessment, management, clinical reasoning and decision making, accuracy of documentation and reflection on case.</p>	Two CbDs selected from six sets of case notes (three per case) conducted with an approved assessor*.
DOPS	<p>Ability to safely and appropriately perform core procedures on a real patient:</p> <ul style="list-style-type: none"> + Suture wound + Bag valve mask + Safe Defibrillation + C-spine manoeuvre, including 3-person log roll + Plaster upper limb + Plaster lower limb 	Six DOPS completed for designated procedures, observed and assessed by an approved assessor*. For this assessment this may include a registered specialist medical practitioner whose area of speciality relates to the applicable area of clinical practice. In the case of the latter the trainee's Primary Supervisor must approve the completed assessment.
Procedural Checklist (PC)	<p>Ability to safely and appropriately perform the procedures that are on the EMC checklist.</p>	Each procedures must be signed-off by an approved assessor*. For this assessment this may include a registered specialist medical practitioner whose area of speciality relates to the applicable area of clinical practice. Once the full PC has been completed, the Primary Supervisor must 'sign-off' the completed checklist.
Start of Placement Meeting (SPM)	<p>Conducted in the first two weeks of placement for trainee to consider on:</p> <ul style="list-style-type: none"> + Learning needs and goals + Strengths and weaknesses + Possible challenges in training + The process of self-reflection during training 	30 minute 'Start of placement' meeting between the trainee and the Primary Supervisor.
Reflection Meeting (RM)	Critically reflect upon training at approximately three-calendar-month intervals	45-minute reflection meeting between the trainee and the Primary Supervisor.
Examination	Multiple choice questions (MCQ) related to curriculum	Online multiple-choice (MCQ) examination conducted under supervision

* An 'approved assessor' refer to the Approved Assessor Matrix, in the [Training Handbook](#).

Unit 1. Fundamental Principles in Emergency Medicine

1.1 Principles of emergency medicine

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
1.1.1 Principles of patient triage in emergency departments.		
1.1.2 Patients may complete their ED journey without a definitive diagnosis.		
1.1.3 Emergency Medicine as a craft that is practiced within a limited time period.		
1.1.4 The primary role of an emergency medicine clinician being able to assess and manage undifferentiated patients.		
1.1.5 Limitations in emergency medicine.		
1.1.6 Documentation of cases in emergency medicine.		
1.1.7 Principles of infection control and the ACEM policy relating to infectious disease.	ST LSR SDL	WBA Exam
1.1.8 The utility of point of care testing in addition to formal investigation(s).		
1.1.9 Principles of primary test ordering.		
1.1.10 ACEM guidelines relating to diagnostic imaging and pathology test ordering.		
1.1.11 Professional conduct in the emergency medicine environment, including with patients, family/whanau, staff and inter-professional colleagues.		
1.1.12 Basic principles of reflecting on own abilities, strengths, limitations in clinical practice.		
1.1.13 The importance of calling for help when required.		
Be able to:		
1.1.14 Elicit a systematic focused clinical history, including from collateral sources, and using appropriate questioning technique and responses to verbal and non-verbal cues.		
1.1.15 Conduct a relevant and targeted physical examination, with appropriate consideration of patient comfort and dignity.		
1.1.16 Explain the examination process to the patient.		
1.1.17 Identify and synthesise problems.		
1.1.18 Apply knowledge of symptomology to determine the likely differential diagnosis.		
1.1.19 Derive and implement a plan for initial investigation and management, with consideration of context, including: <ul style="list-style-type: none"> a. Patient preferences b. ED resources c. Immediate treatment options d. Ongoing care 	ST LSR SDL	SPM RM WBA Exam
1.1.20 Identify patients who are: <ul style="list-style-type: none"> a. Unstable with the immediate need of resuscitation b. Potentially unstable requiring emergent recognition and intervention c. Physiologically stable but undiagnosed 		

continued

1.1.21	Recognise critical symptoms and symptom patterns, and red flags (danger signs) for important diagnoses.		
1.1.22	Choose the optimal investigation(s) and management relevant to the context and environment.		
1.1.23	Manage and control infection in patients.		
1.1.24	Check immunisation status and discuss the importance of appropriate immunisation status.		
1.1.25	Comply with universal precautions, including use of personal protective equipment.		
1.1.26	Provide post blood born virus exposure prophylaxis (PEP) as required.		
1.1.27	Engage actively in local infection control procedures.	ST	SPM
1.1.28	Recognise test result errors and their significance.	LSR	RM
1.1.29	Identify need for observation and monitoring as an acceptable substitution to testing.	SDL	WBA
1.1.30	Prescribe medication, safely and appropriately.		Exam
1.1.31	Demonstrate professionalism and respect when interacting with patients, carers, colleagues and other health professionals.		
1.1.32	Document all pertinent case information in a manner that is clear, legible and accurate and meets legal requirements.		
1.1.33	Reflect on own abilities, strengths and limitations in clinical practice.		
1.1.34	Reflect on cases to affect future clinical patient-centred practice.		
1.1.35	Recognise when help is needed and actively call for help.		

1.2 Prioritisation in clinical practice

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
1.2.1 The need for prioritisation in order to perform multiple tasks tailored to the patient.	ST LSR SDL	WBA Exam
1.2.2 The need for prioritisation when managing multiple patients simultaneously.		
Be able to:		
1.2.3 Identify and prioritise the immediate issues and patient assessment and treatment tasks, even when the diagnosis is unclear.		
1.2.4 Justify the priorities of a list of tasks required in the initial assessment of an undifferentiated patient.		
1.2.5 Justify the priorities of a list of tasks required in the treatment of an undifferentiated patient.	ST LSR SDL	WBA Exam
1.2.6 Adjust priorities in patient care based on ongoing changes in a patient's condition.		
1.2.7 Prioritise assessment and management of a patient using the paucity of available information.		
1.2.8 Implement an effective management plan.		
1.2.9 Provide care for more than one patient at a time.		

1.3 Clinical risk management and safe decision-making

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
1.3.1 Key elements of clinical risk management in an emergency department including: <ol style="list-style-type: none"> a. Telephone advice and triage b. Consultation c. Transfer of responsibility d. Patient discharge 	ST LSR SDL	WBA Exam
1.3.2 ACEM policy on provision of emergency medical telephone support to other health professionals.		
1.3.3 ACEM policy on provision of emergency medical telephone advice to the general public.		
1.3.4 Principles of decision making, including use of decision-making tools.		
1.3.5 The occurrence of bias that may cause errors in decision-making.		
Be able to:		
1.3.6 Apply fundamental principles of risk management to emergency care.		
1.3.7 Identify areas where the use of critical incident reporting can improve care.		
1.3.8 Involve senior personnel in high-risk areas to improve patient safety.	ST LSR SDL	WBA Exam
1.3.9 Communicate and collaborate effectively with staff and other health professionals to ensure continuity of care and reduce risk.		
1.3.10 Use strategies to minimise error in decision-making.		

1.4 Procedures in Emergency Medicine

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
1.4.1 Indications and contraindications for a procedure.		
1.4.2 Own ability to safely and effectively perform procedure.		
1.4.3 Principles of informed consent.	ST	WBA
1.4.4 Preparation and planning for a procedure.	LSR	Exam
1.4.5 Principles of managing complications during and following procedures.	SDL	
1.4.6 Appropriate analgesia for procedure.		
Be able to:		
1.4.7 Identify clinical need for procedure.		
1.4.8 Recognise level of competence needed to perform procedure and seek help as required.		
1.4.9 Proactively seek assistance prior to performing an unfamiliar procedure.		
1.4.10 Discuss the procedure with the patient, including risks, alternative options, and obtain informed consent.		
1.4.11 Appropriately prepare for procedure, including consideration of patients, self, staff, equipment, room, medications.	ST	WBA
1.4.12 Demonstrate knowledge, technique, efficiency, and safety while performing procedures.	LSR	Exam
1.4.13 Detect and act on a problem or complication promptly, including aborting procedure safely and seeking help.	SDL	
1.4.14 Confirm placement of equipment during invasive procedures to minimise risk of complications.		
1.4.15 Consider patient comfort and administer analgesia, as appropriate.		

1.5 Resuscitation medicine 1

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
1.5.1		
1.5.2		
1.5.3	ST LSR SDL	WBA Exam
1.5.4	WS	
1.5.5		
Be able to:		
1.5.6	ST LSR SDL WS	WBA
<hr/>		
Patent airway		
Demonstrate knowledge and understanding of:		
1.5.7	ST LSR SDL WS	WBA Exam
Be able to:		
1.5.8		
1.5.9		
1.5.10		
1.5.11		
1.5.12		
1.5.13		
1.5.14	ST LSR SDL	WBA PC Exam
a.		
b.		
c.		
d.		
e.		
f.		
g.		
i)		

continued

Breathing difficulties**Demonstrate knowledge and understanding of:**

1.5.15	Principles of assessing and treating patients with breathing difficulties.		
1.5.16	Principles of non-invasive ventilation.	ST	WBA
1.5.17	Principles and uses of PEEP.	LSR	Exam
1.5.18	Differences between BiPAP and CPAP.	SDL	

Be able to:

1.5.19	Recognise acute life-threatening breathing problems.		
1.5.20	Assess adequacy of ventilation, respiratory rate and effort and oxygen saturation.		
1.5.21	Initiate appropriate oxygen therapy and other supplemental measures.		
1.5.22	Recognise the need for advanced treatment measures such as non-invasive ventilation and invasive ventilation.		
1.5.23	Recognise need for urgent investigation(s) including; ECG, chest x-ray, arterial blood gas analysis, and provide initial treatment.		
1.5.24	Analyse and interpret:	ST	WBA
	a. simple blood gas results	LSR	Exam
	b. laboratory results	SDL	
	c. straight forward ECG patterns	WS	
	d. plain radiology results including chest x-ray.		
1.5.25	Perform the following procedures:		
	a. Auscultation of chest		
	b. BVM ventilation, both one and two-person		
	c. Pulse oximetry		
	d. Nebulised therapy		

continued

Circulation and fluid difficulties**Demonstrate knowledge and understanding of:**

- | | | | |
|--------|---|------------|------|
| 1.5.26 | Principles of assessing and treating patients with circulation and fluid difficulties. | | |
| 1.5.27 | Basic principles of shock and of assessing and treating patients with shock. | ST | WBA |
| 1.5.28 | The basic physiological mechanisms of cardiovascular compromise especially compensation and the state of adequate cardiac output. | LSR
SDL | Exam |
| 1.5.29 | Principles of fluid resuscitation, including the use of blood products. | | |

Be able to:

- | | | | |
|--------|---|------------|------------|
| 1.5.30 | Assess the adequacy of circulation. | | |
| 1.5.31 | Interpret pulse rate and blood pressure, including postural drop | | |
| 1.5.32 | Recognise cardiovascular compromise. | | |
| 1.5.33 | Estimate degree of dehydration. | | |
| 1.5.34 | Identify the presence of shock. | | |
| 1.5.35 | Identify and initiate management for: | | |
| | a. hypovolemic shock | | |
| | b. distributive shock | | |
| | c. obstructive shock | ST | WBA |
| | d. cardiogenic shock | LSR
SDL | PC
Exam |
| 1.5.36 | Identify common arrhythmias including management of life-threatening arrhythmias. | | |
| 1.5.37 | Recognise the need for coronary reperfusion therapy. | | |
| 1.5.38 | Perform the following procedures: | | |
| | a. Obtain Intravenous access - including large bore resuscitation lines | | |
| | b. Obtain intraosseous access | | |
| | c. Safe defibrillation (in an adult and child) | | |
| | d. Arterial puncture | | |
| 1.5.39 | Initiate fluid resuscitation, including the use of blood products. | | |

continued

Seizure or altered level of consciousness**Demonstrate knowledge and understanding of:**

1.5.40	Principles of assessing and treating patients with seizures or altered levels of consciousness.	ST LSR	WBA
1.5.41	Principles of seizure management including appropriate pharmacology.	SDL	Exam
1.5.42	Principles of physical care of the unconscious patient.	WS	

Be able to:

1.5.43	Assess and treat patients presenting with seizure or altered level of consciousness.		
1.5.44	Position the unconscious patient.		
1.5.45	Recognise the need for airway protection.		
1.5.46	Assess pupillary reactions.		
1.5.47	Screen for localising neurological signs.		
1.5.48	Measure vital signs essential to resuscitation including:		
	a. Blood sugar level	ST	
	b. Glasgow Coma Score	LSR	WBA
1.5.49	Perform the following airway procedures for conscious and unconscious patients:	SDL	Exam
	a. Basic airway manoeuvres	WS	
	b. Use of airway adjunct		
1.5.50	Perform the following procedures:		
	a. Obtain Intravenous access		
	b. Obtain Intraosseous access		
	c. Insertion of nasogastric tube		
	d. Insertion of indwelling urinary catheter		

Exposure**Demonstrate knowledge and understanding of:**

1.5.51	Principles of assessing temperature control in patients.	ST LSR SDL WS	WBA Exam
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Be able to:

1.5.52	Initiate non-invasive temperature control measures.	ST LSR SDL WS	WBA
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1.6 Pain management

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
1.6.1 General principles of assessing pain in adults and in children.		
1.6.2 Types of non-pharmacological analgesia.		
1.6.3 Types of pharmacological analgesia including those administered by the following routes: a. Oral b. Parenteral c. Direct infiltration d. Inhalation/intranasal	ST LSR SDL	WBA Exam
Be able to:		
1.6.4 Accurately assess pain in adults and children.		
1.6.5 Recognise the most appropriate method of pain relief for a presentation.		
1.6.6 Relieve pain in a safe and timely manner.		
1.6.7 Prescribe appropriate analgesia for adult and paediatric patients.		
1.6.8 Perform the following procedures: a. Obtain intravenous access b. Digital nerve block c. Splinting d. Intranasal analgesia (adult or child) e. Parenteral analgesia f. Infiltration of local anaesthetic	ST LSR SDL	WBA PC Exam

1.7 Vulnerable and high-risk patients

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
1.71 Reasons why some patients require specific modifications to ensure health care is delivered.		
1.72 Reasons for increased vulnerability in the following patients: <ol style="list-style-type: none"> a. The psychiatric patient b. The pregnant patient c. The assault victim d. The patient with impairment and/or disability e. Domestic abuse victim f. The refugee g. Culturally and linguistically diverse patient h. The patient that cannot make their own decisions including: <ol style="list-style-type: none"> i) The very young ii) The very old iii) The prisoner 	ST LSR SDL	WBA Exam
1.73 The influence of age, gender and sociocultural factors on access to care and health outcomes.		
1.74 Methods to establish rapport with patients and carers/family/whānau/significant others		
1.75 The principles of a shared plan of care.		
Be able to:		
1.76 Demonstrate family/ whānau centred care in place of patient centred care in relevant situations.		
1.77 Develop a shared plan of care with patient, carers, family/ whānau and appropriate health professionals and stakeholders as indicated.		
1.78 Engage additional services as needed, to assist in providing emergency care to vulnerable patients.	ST LSR SDL	WBA Exam
1.79 Communicate effectively and appropriately with parent/carer/ family/whānau/significant others and patient regarding diagnosis and management plan.		
1.710 Advocate for the patient's best care when referring to other services.		
1.711 Use screening tools as appropriate for the identification of vulnerable patients, particularly those presenting due to domestic, child or elder abuse.		

Unit 2. Managing emergency presentations 1

2.1 Trauma presentations (adult and paediatric)

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.1.1 <C>ABCDE structured approach to trauma: <ul style="list-style-type: none"> a. Catastrophic external haemorrhage (identification and immediate management) b. Airway with cervical spine protection. c. Breathing (immediate and delayed life threats) with oxygenation and ventilation control d. Circulation and haemorrhage control e. Disability and prevention of secondary neurological insults f. Exposure of the patient – preventing hypothermia 	ST LSR SDL WS	WBA Exam
2.1.2 Principles of head injury management.		
2.1.3 Principles of management of sporting concussion.		
2.1.4 Clinical features of and red flags of: <ul style="list-style-type: none"> a. Minor head injury b. Post-concussion syndrome 		
2.1.5 Indications, limitations and utility of trauma series x-rays.		
2.1.6 Pathways for referral and resource mobilisation.		
Be able to:		
2.1.7 Obtain pre-hospital information using ATMIST method: <ul style="list-style-type: none"> a. Age b. Time of Incident c. Mechanism d. Symptoms (including injuries and vital signs at scene and during transport) e. Treatment (pre-hospital) 	ST LSR SDL	WBA PC Exam
2.1.8 Elicit a relevant focused patient history including: <ul style="list-style-type: none"> a. Allergies b. Medications c. Past history d. Last ate/drank e. Events before injury 		

continued

<p>2.1.9 Conduct a primary trauma survey including the following assessments and examinations:</p> <ul style="list-style-type: none"> a. Airway b. Breathing and ventilation c. Circulation and haemorrhage control d. Consciousness level using AVPU and/or GCS e. Pupillary exam and peripheral neurology screen f. Motor and sensory levels when peripheral neurology screen detects an abnormality g. Exposure (preventing hypothermia, including log roll) <p>2.1.10 Utilise primary survey to identify life threats in trauma and secondary surveys to identify other occult injuries and recognise patterns of trauma.</p> <p>2.1.11 Identify and initiate treatment of life, limb and sight threatening injury.</p> <p>2.1.12 Undertake safe initial care of the potential spinal injury patient.</p> <p>2.1.13 Demonstrate a basic approach to trauma series x-ray interpretation.</p> <p>2.1.14 Manage sporting concussion.</p> <p>2.1.15 Perform the following procedures:</p> <ul style="list-style-type: none"> a. Appropriate basic airway manoeuvres b. Cervical spine immobilisation c. 3 - 4 person log roll d. Suture wound e. Closure of wound with tissue adhesive f. Administration of appropriate analgesic g. Application of splinting, including pelvic and long bone fractures h. Obtain intravenous access - Large bore i. Appropriate fluid resuscitation including use of blood products j. Insertion of indwelling urinary catheter (IDC) k. Insertion of oro or nasogastric catheter 	<p>ST LSR SDL WS</p>	<p>WBA PC Exam</p>
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2.2 Limb and musculoskeletal presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.2.1 Presenting features and treatment of common limb and musculoskeletal injuries and illnesses.		
2.2.2 Principles of strain or sprain management.		
2.2.3 Principles of acute fracture management.	ST	
2.2.4 Linking red flag symptoms and signs to potential neurovascular compromise.	LSR	WBA
2.2.5 A list of fractures that pose a risk of permanent limb or joint injury or loss or life threat and those fractures commonly missed.	SDL	Exam
2.2.6 A list of fractures that have potential for complications, especially in elderly and paediatric populations.		
Be able to:		
2.2.7 Elicit relevant focused history for a patient presenting with orthopaedic trauma/injury.		
2.2.8 Perform a targeted limb examination including neurovascular assessment.		
2.2.9 Identify and treat orthopaedic trauma presentations that do not require admission, including: <ul style="list-style-type: none"> a. Simple limb fractures b. Dislocations c. Sprains and strains of joints d. Upper limb injuries, particularly hand injuries e. Spinal injuries f. Pelvic/lower limb injuries 		
2.2.10 Identify and initiate treatment for a limb injury that requires admission, particularly one with neurovascular compromise.	ST	WBA
2.2.11 Interpret limb x-rays.	LSR	Exam
2.2.12 Describe fracture findings as seen on radiological images.	SDL	
2.2.13 Perform the following procedures: <ul style="list-style-type: none"> a. Simple joint reductions b. Application of Plaster-of-Paris backslab to forearm and lower limb c. Digital nerve block d. Immobilisation e. Splinting 		
2.2.14 Prescribe appropriate analgesia.		
2.2.15 Refer, as appropriate patients with a limb injury who require admission.		
2.2.16 Provide discharge instructions post treatment of fractures/dislocations including backslab care and advice on movement restrictions during healing.		

2.3 Burns and skin/ soft tissue presentations

Burns

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.3.1 Burn pathophysiology as described by the Jackson's burn wound model.	ST	
2.3.2 Principles of burn first aid.	LSR	WBA
2.3.3 The systematic effects of inflammation cascade.	SDL	Exam
Be able to:		
2.3.4 Elicit a relevant focused history from a patient presenting with burns.		
2.3.5 Assess the size and depth of burns.		
2.3.6 Identify those patients requiring referral for serious burns.	ST	WBA
2.3.7 Apply appropriate burn first aid and dressing.	LSR	Exam
2.3.8 Administer fluid replacement therapy in adults and paediatric patients.	SDL	
2.3.9 Administer the most appropriate analgesia.		
2.3.10 Provide details of appropriate follow up.		

Skin / soft tissue

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.3.11 Classification and types of wounds.		
2.3.12 Clinical features and appropriate initial treatment of:		
a. Nailbed injuries		
b. Abrasions	ST	WBA
c. Contusions	LSR	Exam
2.3.13 Clinical features and red flags of dermatological emergencies including severe drug reactions (toxic epidermal necrolysis) Stevens-Johnson syndrome/erythema multiforme major, meningococcal infection, staph scaled skin syndrome.	SDL	
Be able to:		
2.3.14 Identify simple and complex lacerations and refer as appropriate.		
2.3.15 Identify and provide appropriate treatment for wounds and follow appropriate processes to avoid potential infection.		
2.3.16 Identify the most appropriate local anaesthetic technique.		
2.3.17 Apply local anaesthetic.		
2.3.18 Administer the most appropriate analgesia.	ST	WBA
2.3.19 Clean and debride contaminated wounds.	LSR	Exam
2.3.20 Perform an incision and drainage of a simple abscess.	SDL	
2.3.21 Close wound and provide after care.		
2.3.22 Establish tetanus status of patient.		
2.3.23 Provide initial management for dermatological emergencies including severe drug reactions (toxic epidermal necrolysis) Stevens-Johnson syndrome/erythema multiforme major, meningococcal infection, staph scaled skin syndrome.		

2.4 Chest pain presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.4.1 Clinical features and red flags of common chest pain presentations.	ST	WBA
2.4.2 Clinical decision making rules used in the management of chest pain	LSR SDL	Exam
Be able to:		
2.4.3 Elicit a relevant focused history and undertake a targeted examination for a patient presenting with chest pain.		
2.4.4 Diagnose the likely underlying cause of chest pain based on clinical features of:		
a. Acute coronary syndrome (including STEMI, non-STEMI and unstable angina)		
b. Pulmonary embolus		
c. Pleuritis		
d. Pneumonia		
e. Pericarditis	ST	WBA
f. Aortic dissection	LSR SDL	Exam
g. Ischaemic chest pain		
2.4.5 Choose the most appropriate investigation(s) for the chest pain presentation.		
2.4.6 Analyse and interpret straightforward ECG patterns or rhythm strips.		
2.4.7 Interpret chest x-rays.		
2.4.8 Provide appropriate treatment including analgesia.		
2.4.9 Perform the following procedures:		
a. Obtain intravenous access		
b. Arterial puncture		

2.5 Respiratory presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.5.1 Clinical features and red flags of dyspnoea.	ST LSR SDL	WBA Exam
Be able to:		
2.5.2 Elicit a relevant focused history and undertake a targeted examination of a patient presenting with dyspnoea.		
2.5.3 Diagnose the likely underlying cause of dyspnoea based on the clinical features of: <ul style="list-style-type: none"> a. Chronic obstructive pulmonary disease/Asthma b. Pneumonia c. Acute pulmonary oedema d. Pulmonary embolism e. Pneumothorax f. Bronchiolitis g. Metabolic causes 	ST LSR SDL WS	WBA Exam
2.5.4 Choose, request, and interpret the most appropriate investigation(s) for a patient with dyspnoea.		
2.5.5 Provide appropriate treatment including: <ul style="list-style-type: none"> a. Oxygen therapy b. Bronchodilators 		
2.5.6 Perform the following procedures: <ul style="list-style-type: none"> a. Obtain intravenous access b. Arterial puncture 		

2.6 Collapse/syncope presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.6.1 Benign and serious causes of syncope and collapse.		
2.6.2 Red flags associated with collapse and syncope: <ul style="list-style-type: none"> a. Chest pain b. Shortness of breath c. Abnormal ECG d. Anaemia e. Systemic hypotension 	ST LSR SDL	WBA Exam
2.6.3 Clinical features and red flags of collapse and syncope presentations.		
Be able to:		
2.6.4 Elicit a relevant focused history and undertake a targeted examination of a patient presenting with collapse/ syncope.		
2.6.5 Diagnose the likely underlying cause of collapse/ syncope based on the clinical features of: <ul style="list-style-type: none"> a. Seizure b. Hypoglycaemia c. Arrhythmia d. Hypovolaemia e. Cardiac arrest 		
2.6.6 Provide acute seizure management.	ST LSR	WBA
2.6.7 Provide acute tachy or bradyarrhythmia management.	SDL	Exam
2.6.8 Choose, request and interpret the most appropriate investigation(s) for a patient with collapse/syncope.	WS	
2.6.9 Provide appropriate treatment including: <ul style="list-style-type: none"> a. IV Glucose b. IV fluids 		
2.6.10 Perform the following procedures: <ul style="list-style-type: none"> a. Basic life support b. Advanced life support c. Measurement of blood sugar levels 		

2.7 Neurological presentations

Learning Objective	Teaching and Learning Strategies	Assessment
<i>Demonstrate knowledge and understanding of:</i>		
<p>2.7.1 Red flags associated with headache including:</p> <ol style="list-style-type: none"> a. Pain history (worst ever/thunderclap) b. Associated syncope c. Localising neurological signs d. Second system involvement such as chest pain or neurological deficits which may indicate aortic or other vascular dissection e. Presence of high-risk features such as: <ol style="list-style-type: none"> i) anticoagulants ii) presence of ventricular shunts iii) trauma iv) fever v) immunocompromise vi) substance abuse 	<p>ST LSR SDL</p>	<p>WBA Exam</p>
<p>2.7.2 Clinical features of headache presentations.</p>		

continued

Be able to:

- 2.7.3 Elicit a relevant focused history and undertake a targeted examination of a patient presenting with a headache.
- 2.7.4 Diagnose the likely underlying cause of headache based on the clinical features of:
- a. Migraine
 - b. Tension headache
 - c. Subarachnoid Haemorrhage
 - d. Meningitis
 - e. Space-occupying lesion
 - f. Temporal arteritis
 - g. Encephalitis
 - h. Hypertension
 - i. Cerebral vessel dissection
 - j. Sinusitis
 - k. Tumour
 - l. Glaucoma
 - m. Dental
- 2.7.5 Choose, request, and interpret the most appropriate investigation(s) including cerebral CT scan.
- 2.7.6 Provide appropriate treatment including:
- a. Analgesia
 - b. IV antibiotics
- 2.7.7 Perform the following procedures:
- a. Obtain intravenous access
 - b. Blood sugar levels/ketones
 - c. Measure Glasgow Coma Score
- 2.7.8 Conduct a mini mental state examination.
- 2.7.9 Refer patient as needed.

ST	WBA
LSR	PC
SDL	Exam

2.8 Psychiatric and mental health presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.8.1 Legal principles and regulations pertaining to emergency medicine and mental health.		
2.8.2 Role and application relating to involuntary treatment as per the Mental Health Act in the relevant jurisdiction.		
2.8.3 Common mental health presentations in the ED and appropriate first line management strategies.	ST LSR SDL	WBA Exam
2.8.4 Distinction between mental health related presentations and those modified by acute and/or chronic illness and/ or illicit drug use.		
2.8.5 Collaborative/stepped care to patients with co-morbid physical and mental health issues.		
Be able to:		
2.8.6 Apply the relevant regional mental health legislation as appropriate.		
2.8.7 Undertake appropriate responsibilities in accordance with the relevant legal principles and regulations.		
2.8.8 Assess the psychiatric state of a patient including but not limited to: <ul style="list-style-type: none"> a. Likelihood of self-harm b. Depression c. Anxiety disorders d. Acute psychoses e. Behavioural emergencies 		
2.8.9 Identify those who are alcohol and drug/substance dependent.		
2.8.10 Identify common mental health presentations and undertake appropriate initial management.	ST LSR SDL	WBA Exam
2.8.11 Provide initial treatment of the acutely agitated patient.		
2.8.12 Recognise failure to de-escalate a behavioural disturbance and promptly seek senior assistance.		
2.8.13 Undertake assessment of suicide risk and liaise with appropriate psychiatric services.		
2.8.14 Conduct a formal mental state examination.		
2.8.15 Recognise impending escalation of aggression (danger signs) which could place self and others in danger.		
2.8.16 Recognise patients who would benefit from cultural support.		
2.8.17 Identify appropriate treatment, which may require referral.		

2.9 Altered level of consciousness/confusion presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.9.1 Clinical features and red flags of altered level of consciousness and confusion.	ST LSR SDL	WBA Exam
Be able to:		
2.9.2 Elicit a relevant focused history and undertake a targeted examination of a patient presenting with an altered level of consciousness/confusion.		
2.9.3 Diagnose the likely cause of altered level of consciousness/confusion based on the clinical features of the following presentations: <ul style="list-style-type: none"> a. Circulatory b. Cardiogenic c. Neurological d. Sepsis/shock e. Trauma f. Electrolyte/metabolic abnormalities including hypoglycaemia g. Poisoning 		
2.9.4 Choose, request and interpret appropriate investigation(s).	ST	WBA
2.9.5 Provide appropriate treatment including: <ul style="list-style-type: none"> a. Airway management b. Oxygenation and ventilation c. Circulatory support d. Neurologic resuscitation measures i.e. preventing secondary neurological insults e. Fluid and electrolyte therapy f. Other specific therapies as per underlying cause 	LSR SDL WS	PC Exam
2.9.6 Perform the following procedures: <ul style="list-style-type: none"> a. Basic airway manoeuvres b. Obtain intravenous access 		
2.9.7 Measure Glasgow Coma Score.		
2.9.8 Carry out a neurological examination.		

2.10 Geriatric presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
<p>2.10.1 Issues surrounding older person patients in the ED including:</p> <ul style="list-style-type: none"> a. Adequate support services b. Increased medical complexity c. Advanced healthcare directives d. Identification of vulnerable patients e. Elder abuse f. Psychological factors g. Legal, social and guardianship factors <p>2.10.2 The frequency and impact of the following in the older persons as a group:</p> <ul style="list-style-type: none"> a. Infections b. Dementia c. Delirium d. Cardiovascular events / stroke <p>2.10.3 ACEM's policy on The Care of Elderly Patients in the Emergency Department.</p>	ST LSR SDL	WBA Exam
Be able to:		
<p>2.10.4 Undertake appropriate assessment of older persons presenting in the emergency department.</p> <p>2.10.5 Follow local guidelines with regard to the reporting of suspected 'elder abuse'.</p>	ST LSR SDL	WBA Exam

2.11 Paediatric presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.11.1 Preventable causes of paediatric cardiac arrest.	ST LSR SDL	WBA Exam
Be able to:		
2.11.2 Elicit a relevant focused history and undertake a targeted examination of a paediatric patient.	ST LSR SDL	WBA Exam
2.11.3 Identify red flags in history and examination for non-accidental injury and follow local procedures and protocols as appropriate.		
Febrile child		
Demonstrate knowledge and understanding of:		
2.11.4 Red flags in a febrile child: <ul style="list-style-type: none"> a. Poorly interactive child b. Limping or non-weight-bearing child c. Severe muscle pain d. Floppy, listless child e. Rash 	ST LSR SDL	WBA Exam
Be able to:		
2.11.5 Carry out a targeted examination of the ear, nose and throat.		
2.11.6 Carry out a structured examination of the infant with inconsolable crying.		
2.11.7 Distinguish between benign and sinister causes of fever.		
2.11.8 Recognise when fever is a sign of sepsis.		
2.11.9 Choose, request, and interpret appropriate investigation(s) for a febrile child.		
2.11.10 Provide appropriate treatment for a febrile child including: <ul style="list-style-type: none"> a. IV Fluids b. Antipyretics c. Antibiotics 	ST LSR SDL	WBA Exam
2.11.11 Perform the following procedures: <ul style="list-style-type: none"> a. Calculate fluid therapy requirements b. Urine collection appropriate for age c. Obtain and secure intraosseous access d. Obtain and secure intravenous access 		
2.11.12 Explain and interpret urine collection.		

continued

Child with breathing difficulty**Demonstrate knowledge and understanding of:**

2.11.13	Apnoea as a red flag in an infant with breathing difficulty.	ST	WBA
2.11.14	Clinical features of common causes of breathing difficulties in children.	LSR SDL	Exam

Be able to:

2.11.15	Diagnose the likely underlying cause of paediatric respiratory difficulty based on the clinical features of: <ul style="list-style-type: none"> a. Bronchiolitis b. Croup c. Pneumonia d. Asthma e. Metabolic f. Foreign body 		
2.11.16	Choose, request and interpret appropriate investigation(s) for a child with a breathing difficulty including chest x-ray.	ST LSR SDL	WBA PC
2.11.17	Measure oxygen saturation levels.	WS	Exam
2.11.18	Perform basic airway techniques for an infant and child.		
2.11.19	Teach use of spacer.		
2.11.20	Provide appropriate treatment including: <ul style="list-style-type: none"> a. Oxygen therapy b. Administer spacer c. Administer nebuliser d. Bronchodilators e. Steroids 		

continued

Child with vomiting**Demonstrate knowledge and understanding of:**

2.11.21 Red flags in an unwell child with vomiting including:

- a. Severe abdominal pain
- b. Signs of shock or other symptoms of severe dehydration
- c. Bile stained vomiting
- d. Headache
- e. Rash

ST
LSR
SDL

WBA
Exam

2.11.22 Clinical features of causes of vomiting in paediatric patients.

Be able to:

2.11.23 Diagnose the likely underlying cause of paediatric vomiting based on the clinical features of:

- a. Gastroenteritis
- b. Pyloric stenosis
- c. Urinary tract infection
- d. Appendicitis
- e. Diabetic ketoacidosis
- f. Raised intracranial pressure
- g. Intussusception

2.11.24 Perform the following procedures:

- a. Assess hydration
- b. Calculate fluid therapy requirements
- c. Obtain intravenous access
- d. Obtain intraosseous access
- e. Insert nasogastric tube

ST
LSR
SDL

WBA
PC
Exam

2.11.25 Consult senior clinician if investigation(s) are required.

2.11.26 Provide appropriate treatment including:

- a. Rehydration including oral, nasogastric or intravenous as appropriate
- b. Treatment specific for underlying cause
- c. Treatment for acute vomiting

2.12 Obstetric presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.12.1 Obstetric and gynaecological presentations common to the emergency department, including causes of bleeding/pain in first, second and third trimester.	ST LSR SDL	WBA Exam
2.12.2 Safe and appropriate use of medications in different stages of pregnancy respecting (their) pharmacological properties.		
Be able to:		
2.12.3 Elicit an obstetric and gynaecological focused history and carry out an appropriate examination.		
2.12.4 Diagnose the likely underlying cause of bleeding/pain in the first trimester of pregnancy based on the clinical features of: <ul style="list-style-type: none"> a. Threatened/incomplete miscarriage b. Ectopic pregnancy 		
2.12.5 Check blood group/ rhesus status		
2.12.6 Diagnose the likely underlying cause of bleeding/pain in the second and third trimester of pregnancy based on the clinical features of: <ul style="list-style-type: none"> a. Pre-eclampsia/ Eclampsia b. Premature labour c. Placenta abruption/previa 	ST LSR SDL	WBA Exam
2.12.7 Choose, request and interpret the most appropriate investigation(s) including foetal doppler.		
2.12.8 Perform the following procedures: <ul style="list-style-type: none"> a. Obtain intravenous access b. Speculum vaginal examination and visualisation of the cervical os 		
2.12.9 Safely carry out oxygen delivery.		
2.12.10 Provide appropriate and safe analgesia in labour.		
2.12.11 Appropriately and safely prescribe for a pregnant woman or breastfeeding woman.		
2.12.12 Refer patient appropriately, including immediate referral to labour ward when required.		

2.13 Toxicological and envenomation presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.13.1 Legal, psychiatric and social aspects of overdose.		
2.13.2 Principles of a risk assessment including agent, dose, time of ingestion, clinical features and patient factors.		
2.13.3 Principles of management of a poisoned patient including resuscitation, supportive care, decontamination, enhanced elimination, antidotes and disposition.		
2.13.4 Distinguishing features of: <ul style="list-style-type: none"> a. Adverse drug reactions b. Poisoning c. Drug overdose d. Envenomation 	ST LSR SDL	WBA Exam
2.13.5 Clinical features of common toxidromes including: <ul style="list-style-type: none"> a. Opioid b. Sympathomimetic c. Sedative/hypnotic d. Ethanol 		
2.13.6 The role of antidotes and antivenoms for common toxidromes.		
Be able to:		
2.13.7 Elicit a relevant focused history and undertake a targeted examination of a patient presenting with a toxicological emergency.		
2.13.8 Diagnose the likely underlying cause of toxicological or toxinological presentations based on the clinical features of: <ul style="list-style-type: none"> a. Adverse drug reactions b. Poisoning c. Drug overdose d. Envenomation 		
2.13.9 Perform a risk assessment of the poisoned patient.		
2.13.10 Demonstrate an appropriate approach to the envenomed patient including: <ul style="list-style-type: none"> a. Basic management of snake bite b. Safe application of pressure immobilisation bandage (PIB) c. Management of common envenomation syndromes d. Seek timely advice from a toxicologist 	ST LSR SDL WS	WBA PC Exam
2.13.11 Conduct the following investigation(s) as appropriate: <ul style="list-style-type: none"> a. Assessment of blood sugar level b. ECG 		
2.13.12 Access poisons information as necessary.		
2.13.13 Demonstrate an approach to paracetamol poisoning including: <ul style="list-style-type: none"> a. interpretation of paracetamol levels b. institution of NAC antidote therapy 		
2.13.14 Provide other antidotes as advised by a toxicologist.		
2.13.15 Provide appropriate treatment including: <ul style="list-style-type: none"> a. Airway and circulation support b. Decontamination with charcoal as advised by a toxicologist 		

2.14 Gastrointestinal presentation

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.14.1 Clinical features and red flags of common gastrointestinal emergencies.		
2.14.2 Red flags associated with vomiting including:		
a. Distended abdomen	ST	WBA
b. Haematemesis	LSR	Exam
c. Pain out of proportion to clinical examination findings	SDL	
d. Causes external to GI pathologies including raised intracranial pressure, acute cardiac ischemia		
Be able to:		
2.14.3 Elicit a relevant focused history and undertake a targeted examination of an adult patient presenting with vomiting.		
2.14.4 Diagnose the common causes of vomiting based on the clinical features of:		
a. Gastritis/Gastroenteritis		
b. Raised intracranial pressure		
c. Hyperemesis gravidarum		
d. Upper gastrointestinal bleed		
e. Diabetic ketoacidosis		
2.14.5 Diagnose common causes of diarrhoea including:		
a. Gastroenteritis		
b. Infectious colitis		
c. Lower gastrointestinal bleed including:		
i) Diverticulitis	ST	WBA
ii) Inflammatory bowel disease i.e. Crohns and ulcerative colitis	LSR	PC
SDL	Exam	
2.14.6 Choose, request, and interpret appropriate investigation(s) for adults presenting with vomiting.		
2.14.7 Provide appropriate first line treatment including:		
a. Antiemetics		
b. IV fluids and electrolyte management		
c. Insulin therapy		
d. Blood product replacement		
2.14.8 Perform the following procedures:		
a. Insertion of oral or nasogastric tube		
b. Obtain intravenous access		
c. Obtain intraosseous access		

2.15 Abdominal and pelvic pain presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.15.1 Clinical features and red flags of abdominal and pelvic pain including extremes of age.	ST LSR SDL	WBA Exam
2.15.2 Genitourinary emergencies.		
2.15.3 Principles of paracentesis.		
Be able to:		
2.15.4 Elicit a relevant focused history and undertake an appropriate examination in a patient presenting with abdominal/ pelvic pain.	ST LSR SDL	WBA Exam
2.15.5 Diagnose the likely underlying cause of abdominal/pelvic pain based on the clinical features of:		
a. Acute appendicitis		
b. Bowel obstruction		
c. Bowel ischemia		
d. Diverticulitis		
e. Acute peritonitis		
f. Biliary colic		
g. Pancreatitis		
h. Renal colic		
i. Abdominal aortic aneurysm		
j. Ectopic pregnancy		
k. Pelvic inflammatory disease		
l. Testicular torsion		
m. Ovarian torsion		
2.15.6 Choose, request and interpret appropriate investigation(s) for a patient presenting with abdominal/ pelvic pain.	ST LSR SDL	WBA Exam
2.15.7 Provide appropriate treatment including analgesia.		
2.15.8 Perform a vaginal examination to assess pelvic pain.		

2.16 Ophthalmological presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.16.1 Clinical features and red flags of common ophthalmological presentations to the emergency department.		
2.16.2 Uncommon presentations that require referral as an outpatient.		
2.16.3 Sight threatening presentations that require immediate referral and transfer including acute glaucoma and retinal detachment.	ST LSR SDL	WBA Exam
2.16.4 Common drugs used in eye examinations including topical anaesthetics and pupil dilators.		
2.16.5 Principles of intraocular pressure measurement.		
Be able to:		
2.16.6 Elicit a relevant focused history and undertake a targeted examination of patients presenting with common ophthalmological emergencies.		
2.16.7 Identify sight-threatening ophthalmological presentations through focused history and examination.		
2.16.8 Diagnose the likely underlying cause of common ophthalmological presentation based on the clinical features of:		
a. Corneal abrasions		
b. Conjunctivitis		
c. Corneal foreign body		
d. Corneal ulcers		
e. Lid margin laceration	ST LSR SDL	WBA Exam
f. Retinal detachment		
2.16.9 Choose the most appropriate investigation(s) including:		
a. Use of a slit lamp		
b. Test for visual acuity		
c. Use of the ophthalmoscope		
2.16.10 Perform appropriate procedures including:		
a. Removal of foreign body from the eye		
b. Irrigation of an eye		
2.16.11 Refer when necessary		

Unit 3. Understanding the emergency care environment

3.1 Legal issues and forensic medicine

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.1.1		
3.1.2		
a.		
b.		
c.		
3.1.3		
3.1.4		
3.1.5		
3.1.6		
3.1.7		
3.1.8	ST	WBA
3.1.9	LSR	Exam
3.1.10	SDL	
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Be able to:		
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3.1.23	ST	WBA
3.1.24	LSR	Exam
3.1.25	SDL	
3.1.26		
3.1.27		

3.2 Pre-hospital care, retrieval, admission, transfer and discharge

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.2.1 Pre-hospital care systems to ensure optimal patient care across the pre-hospital/ ED interface.	ST LSR SDL	WBA Exam
Be able to:		
3.2.2 Communicate effectively with pre-hospital staff, including ambulance teams.		
3.2.3 Identify the most appropriate course of action for the patient including: <ul style="list-style-type: none"> a. Admission b. Transfer c. Discharge 		
3.2.4 Clarify patient needs for community support services and identify appropriate community support services on discharge.	ST LSR SDL	WBA Exam
3.2.5 Ensure patient meets requirements for discharge.		
3.2.6 Respect cultural issues during process of discharge/admission/transfer.		
3.2.7 Communicate effectively with patients, carers, family/ whānua and health team members regarding patient disposition.		
3.2.8 Write concise, informative discharge letters ensuring that documentation is completed, as per policy and procedure.		

3.3 Teamwork in the ED environment

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.3.1 The characteristics of effective and ineffective teams.	ST LSR SDL	WBA Exam RM
Be able to:		
3.3.2 Actively seek the views of others.		
3.3.3 Promote the sharing of information and resources.		
3.3.4 Identify roles and responsibilities within a team.	ST	WBA
3.3.5 Identify and manage time critical patients.	LSR	Exam
3.3.6 Prioritise tasks whilst minimising error.	SDL	RM
3.3.7 Use effective verbal and non-verbal communication.		
3.3.8 Employ strategies to manage conflict of interests and differences of opinion.		

3.4 Personal health and wellbeing

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.4.1 Factors which may impact health and well-being including: <ol style="list-style-type: none"> Noisy, busy department Conflicting pressures to complete multiple tasks Challenging clients, patients and relatives Inter-professional conflict and competing priorities within time-critical situations 	ST LSR SDL	WBA RM Exam
3.4.2 The impact of shift work and stress on the well-being and function of emergency practitioners.		
Be able to:		
3.4.3 Recognise risks to personal health and other wellbeing concerns and address them in appropriate manner including: <ol style="list-style-type: none"> Self-care Time management Communication Counselling support if necessary Mentoring 	ST LSR SDL	WBA RM Exam
3.4.4 Plan workload and activities to fulfil work requirements and commitments, without compromising own health.		

3.5 Public health

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
<p>3.5.1 Key issues and trends in community health including:</p> <ul style="list-style-type: none"> a. Mandatory notification e.g. child abuse, elderly abuse, firearms, unfit to drive and drowning. b. Substance abuse c. Immunisation d. Community epidemics e. Infectious diseases control including notification, contact identification, tracing and prophylaxis (e.g. meningococcus) f. Domestic violence g. Health promotional strategies and interventions h. Injury surveillance and prevention i. Organ donation and transplantation protocols 	<p>ST LSR SDL</p>	<p>WBA Exam</p>
Be able to:		
3.5.2 Actively participate in health promotion at an individual and patient level.		
3.5.3 Accurately detect and manage mandatory notification cases and infectious diseases.	<p>ST LSR SDL</p>	<p>WBA Exam</p>
3.5.4 Safely and appropriately co-ordinate notification responses in required cases.		
3.5.5 Conduct health promotion interventions including the brief opportunistic intervention in ED E.g. smoking cessation, alcohol and drug intake.		

3.6 Communication

Principles of effective communication

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.6.1 Principles of good communication.		
3.6.2 Factors which may impact on effective communication and relationships including: <ul style="list-style-type: none"> a. Working styles b. Values, attitudes and background c. Personality d. Generational differences e. Issues of power f. Gender 	ST LSR SDL	WBA Exam
3.6.3 Principles of managing communication challenges including delivering bad news.		
3.6.4 Principles of efficient and accurate record keeping and documentation.		
Be able to:		
3.6.5 Apply the techniques of good communication and active listening to clinical practice.		
3.6.6 Convey information, including verbally, in a way that is clear, succinct and accurate.		
3.6.7 Use closed loop communication.		
3.6.8 Use graded assertive communication when advocating for a patient.		
3.6.9 Interpret the non-verbal-cues of others.		
3.6.10 Identify barriers to effective communication within the Emergency Medicine context.	ST LSR SDL	WBA Exam
3.6.11 Quickly establish rapport, trust and understanding.		
3.6.12 Communicate effectively with colleagues and other health professionals to develop a shared plan of care.		
3.6.13 Communicate effectively with patients, carers, family/ whānau to produce patient centred and family centred care.		
3.6.14 Communicate bad news clearly and with sensitivity to a patient and/or carer.		
3.6.15 Empathise with and support a patient and/or carer when conveying bad news.		
3.6.16 Document cases clearly, succinctly, legibly and accurately.		

continued

Communicating with culturally and linguistically diverse groups

Demonstrate knowledge and understanding of:

3.6.17	Principles of intercultural communication, cultural awareness, sensitivity and safety as it relates to emergency medicine.	ST	WBA
3.6.18	Principles of using interpreter services and Indigenous support workers.	LSR	Exam
3.6.19	The importance of understanding one's own cultural views and recognising implicit bias and privilege.	SDL	RM

Be able to:

3.6.20	Demonstrate awareness of cultural issues and practices, which may have an impact on service delivery.		
3.6.21	Assess and manage patients in a culturally safe manner.		
3.6.22	Work with and communicate effectively with diverse groups.		
3.6.23	Communicate appropriately with ethnically diverse patients.		
3.6.24	Recognise situations where working with and interpreter is appropriate and work with them appropriately to communicate with the patient.		
3.6.25	Incorporate cultural, ethnic, religious, spiritual and linguistic considerations of the patient when creating patient centred and family/whānau centred management plans.		
3.6.26	Involve the family/whānau/significant others appropriately, as an example of being culturally sensitive to the patient.	ST LSR SDL	WBA Exam RM
3.6.27	Recognise situations where working with an Indigenous support worker is appropriate.		
3.6.28	Inform other clinicians, particularly on referral, of cultural aspects of the patient which may significantly affect their post emergency care.		
3.6.29	Work in culturally competent way showing respect for, and understanding of, diversity in the workplace.		
3.6.30	Continue to learn about the experience of different cultures.		
3.6.31	Contribute to the creation of a culturally safe workplace as applicable to the practice of emergency medicine.		
3.6.32	Reflect on how the doctor's own culture influences the delivery of emergency medicine.		

3.7 Indigenous health

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.7.1 The impact of culture and the importance of cultural safety in emergency medical care.		
3.7.2 Attitudes, beliefs and customs of Aboriginal and Torres Strait Islander peoples and Māori relating to health and health care, including: <ol style="list-style-type: none"> acute illness injury and death medical treatment transportation and separation from family/whānau and local community 		
3.7.3 Patterns of acute illness and injury particular to Aboriginal and Torres Strait Islander and Māori populations.		
3.7.4 Barriers to health care for Aboriginal and Torres Strait Islander and Māori patients.	ST LSR SDL	WBA Exam
3.7.5 Most common health issues for Pacific peoples.		
3.7.6 Diversity of ways that Indigenous peoples self-identify.		
3.7.7 The historical and ongoing effects of colonisation on Aboriginal, Torres Strait Islander peoples and Māori and its specific impacts on health and wellbeing through the loss of language, culture, ancestral lands, displacement, homelessness, unemployment/loss of resources, and increased interaction with the justice system.		
3.7.8 Knowledge of Indigenous specific programs at a local and federal level.		
3.7.9 ACEM's Reconciliation Action Plan and Te Rautaki Manaaki Mana: Excellence in Emergency Care for Māori.		
Be able to:		
3.7.10 Communicate appropriately with Aboriginal and Torres Strait Islanders, and Māori.		
3.7.11 Communicate appropriately and effectively with Aboriginal and Torres Strait Islander and Māori support workers in facilitating care for Indigenous patients.		
3.7.12 Recognise an Indigenous person as someone who identifies themselves as Indigenous and is accepted as Indigenous by their community.	ST LSR SDL	WBA Exam
3.7.13 Recognise the regional diversity of Indigenous language, cultures and customs.		
3.7.14 Recognise, respect and utilise resources that are locally available for Indigenous patients, including Indigenous liaison officers and local Indigenous primary health care services.		
3.7.15 Recognise the health disparities commonly experienced by the Indigenous populations of Australia and Aotearoa New Zealand.		

3.8 Rural and remote emergency medicine 1

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.8.1 The variety of contexts in which emergency medicine is practiced, including variation due to increasing remoteness and decreased hospital size.		
3.8.2 Communication medium used in rural and remote settings including telehealth medium.		
3.8.3 Resource limitations in rural and remote emergency departments.		
3.8.4 Limitations associated with requesting investigation(s) in rural and remote emergency departments.		
3.8.5 Difference between presentations in rural and remote emergency departments compared with presentations to urban emergency departments.	ST LSR	WBA Exam
3.8.6 The impact of distance on the practice of emergency medicine in rural and remote emergency departments including: <ul style="list-style-type: none"> a. Delay in presentation b. Challenges for referral c. Challenge of distance, access to retrieval and subspecialties. 	SDL	
3.8.7 Common rural attitudes to health and healthcare.		
3.8.8 Emergency medicine networks.		
3.8.9 Emergency medicine as part of a network.		
Be able to:		
3.8.10 Use information technology, telehealth, phone and radio effectively to seek advice and communicate with distant health professionals and services.	ST LSR SDL	WBA

Emergency Medicine Diploma

EMD Key

Abbreviation	Meaning
ST	Supervised training
LSR	eLearning module
WS	Workshops
SDL	Self-directed learning
PC	Procedural checklist
SPM	Start of placement meeting
RM	Reflection meeting
Exam	Online MCQ examination
WBAs	Workplace-based Assessments
Mini-CEX	Mini-Clinical Evaluation Exercise
CbD	Case-based Discussion
DOPS	Direct Observation of Procedural Skills

EMD Units, teaching and learning strategies, and assessment

Unit	Teaching and learning strategies	Assessment strategies
Unit 1 Critical care in emergency medicine	+ ST + LSR + WS + SDL	+ Mini-CEX + CbD + DOPS + PC + Exam
Unit 2 Managing emergency presentations 2	+ ST + LSR + WS + SDL	+ Mini-CEX + CbD + DOPS + PC + Exam
Unit 3 Professional practice in the emergency care environment	+ ST + LSR + SDL	+ Mini-CEX + CbD + DOPS + PC + SPM + RM + Exam

EMD Workshops

Trainees are required to complete the following workshops:

- + Advanced Paediatric Life Support (APLS)
- + Early Management of Severe Trauma (EMST) or Emergency Trauma Management (ETM).

eLearning Modules

The Indigenous Health and Cultural Competency Modules are required for all trainees. Other eLearning Modules included in the Learning Support Resources are highly recommended.

EMD Units and themes

Unit	Themes
Unit 1 Critical care in emergency medicine	<ul style="list-style-type: none"> + Resuscitation medicine 2 + Pain management
Unit 2 Managing emergency presentations 2	<ul style="list-style-type: none"> + Complex trauma + Complex orthopaedic + Cardiac + Complex haemodynamic + Advanced neurological + Complex psychiatric + Advanced paediatric + Infectious disease + Renal, metabolic and endocrine + Musculoskeletal + Complex obstetric and gynaecological + Advanced toxicological and toxinological + Ear, nose and throat
Unit 3 Professional practice in the emergency care environment	<ul style="list-style-type: none"> + Professional and ethical practice + Advanced communication + Management of the daily ED + Rural and remote emergency medicine 2

EMD Assessment Methods

Tool	What is assessed?	Methodology
Mini-CEX*	History taking, examination, clinical synthesis, communication, professionalism, organisation and efficiency based on the following: <ul style="list-style-type: none"> + <i>Obstetrics & Gynaecological</i> + <i>Multi-trauma</i> + <i>Neurology</i> + <i>Toxicology</i> + <i>Renal/endocrine/metabolic</i> 	Five 15 to 20-minute Mini-CEXs observed and assessed by an approved assessor*.
CbD*	Assessment, management, clinical reasoning and decision making, accuracy of documentation and reflection on case. The cases must be medium to high complexity and are required to relate to the EMD curriculum.	Two CbDs selected from six sets of case notes (three per case) conducted with an approved assessor*.
DOPS	Ability to safely and appropriately perform core procedures on a real patient <ul style="list-style-type: none"> + <i>Non-invasive ventilation</i> + <i>Procedural sedation</i> + <i>Lumbar puncture</i> + <i>Rapid sequence induction (RSI) – plus ventilator setup</i> + <i>Joint or Fracture reduction (major/ extremity)</i> 	Five DOPS completed for designated procedures, observed and assessed by an approved assessor*. For this assessment this may include a registered specialist medical practitioner whose area of speciality relates to the applicable area of clinical practice. In the case of the latter the trainee's Primary Supervisor must approve the completed assessment.
Procedural Checklist (PC)	Ability to safely and appropriately perform the procedures that are on the EMD procedural checklist.	Each procedures must be signed-off by an approved assessor*. For this assessment this may include a registered specialist medical practitioner whose area of speciality relates to the applicable area of clinical practice. Once the full PC has been completed, the Primary Supervisor must 'sign-off' the completed checklist.
Start of Placement Meeting (SPM)	Conducted in the first two weeks of placement for trainee to consider on: <ul style="list-style-type: none"> + Learning needs and goals + Strengths and weaknesses + Possible challenges in training + The process of self-reflection during training 	30-minute Start of placement meeting between the trainee and Primary Supervisor
Reflection Meeting (RM)	Critically reflect upon training at approximately 3-calendar-month intervals	45-minute reflection meeting between the trainee and the Primary Supervisor
Examination	Multiple-choice questions (MCQs) related to the curriculum	Online multiple-choice questions (MCQs) related to the curriculum, conducted under supervision.

* **Either** one mini-CEX or one CbD must be done in a paediatric patient

* For the definition of an 'approved assessor' refer to the Approved Assessor Matrix, in the [Training handbook](#).

Unit 1. Critical care in emergency medicine

1.1 Resuscitation medicine 2

Difficult airway

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
1.1.1 Clinical features of a difficult airway.		
1.1.2 A structured approach to the difficult airway including: <ul style="list-style-type: none"> a. Assessment b. Rescue airway algorithms c. Techniques d. Equipment used e. Managing the “can’t intubate, can’t oxygenate” scenario. 	ST LSR SDL WS	WBA Exam
1.1.3 Indications for intubation.		
1.1.4 Principles of rapid sequence intubation (RSI).		
1.1.5 Pharmacology of common induction drugs and paralytics including those for: <ul style="list-style-type: none"> a. maintenance of sedation b. analgesia c. paralysis. 		
1.1.6 Use of end tidal carbon dioxide monitoring.		
1.1.7 Justification for performing a pre-emptive intubation of a patient.		
Be able to:		
1.1.8 Identify and manage patients with a potential difficult or threatened airway.		
1.1.9 Recognise when to seek assistance.		
1.1.10 Actively call for help as needed.		
1.1.11 Choose and request the most appropriate investigation(s) for a difficult airway.		
1.1.12 Provide appropriate treatment for upper airway obstruction.	ST LSR SDL WS	WBA PC Exam
1.1.13 Perform simple rapid sequence intubation (RSI) including initial ventilator settings.		
1.1.14 Develop a failed intubation algorithm.		
1.1.15 Perform an endotracheal intubation (insertion of ETT).		
1.1.16 Perform an emergency intubation (e.g., after RSI).		
1.1.17 Lead a resuscitation team.		

continued....

Complex breathing difficulties**Demonstrate knowledge and understanding of:**

- | | | | |
|--------|--|-----|------|
| 1.1.18 | Clinical features of respiratory failure. | | |
| 1.1.19 | Causes of complex breathing difficulties. | | |
| 1.1.20 | Trigger points at which to support ventilation or escalate treatment. | ST | |
| 1.1.21 | Different non-invasive ventilation modalities. | LSR | WBA |
| 1.1.22 | Strategies to improve safe intubation in patients with cardiorespiratory comorbidities | SDL | Exam |
| 1.1.23 | Setting up a transport ventilator for an adult. | WS | |

Be able to:

- | | | | |
|--------|--|-----|------|
| 1.1.24 | Diagnose the likely cause of complex breathing difficulties based on the clinical features of: | | |
| | a. Life threatening asthma | | |
| | b. Exacerbations of chronic obstructive pulmonary disease | | |
| | c. Acute pulmonary oedema | | |
| | d. Massive pulmonary embolism | | |
| | e. Pneumonia with para-pneumonic effusion | | |
| | f. Tension pneumothorax | | |
| | g. Haemothorax | | |
| | h. Pleural effusion | | |
| | i. Pneumomediastinum | | |
| 1.1.25 | Choose the most appropriate investigation(s) for a complex breathing problem. | | |
| 1.1.26 | Interpret chest xrays and blood gases. | | |
| 1.1.27 | Stratify the severity of risk in the following conditions: | | |
| | a. Asthma | | |
| | b. Chronic obstructive pulmonary disease, including seeking to identify and treat underlying cause for exacerbation i.e. infection, pulmonary embolus, pneumothorax, acute coronary syndrome | ST | WBA |
| | c. Acute pulmonary oedema | LSR | PC |
| | d. Pulmonary embolus | SDL | Exam |
| | e. Pneumonia | | |
| | i) Look for systemic sepsis | | |
| | ii) Special consideration in the immunosuppressed and patients in wet tropical areas | | |
| 1.1.28 | Stratify risk, choose imaging and manage the pregnant patient with presumed pulmonary embolus. | | |
| 1.1.29 | Provide appropriate treatment, including pharmacotherapy, for: | | |
| | a. Life-threatening asthma | | |
| | i) Magnesium | | |
| | ii) Adrenaline | | |
| | iii) Aminophylline | | |
| | iv) Salbutamol nebulised and IV | | |
| | v) Hydrocortisone | | |
| | vi) Ipratropium bromide | | |
| | vii) Non-invasive ventilation | | |

continued....

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- b. Chronic obstructive pulmonary disease
 - i) Seek and treat underlying causes for exacerbation i.e. infection, pulmonary embolus, pneumothorax, acute coronary syndrome
 - ii) O2 therapy, with consideration of risk of hypercapnia
 - iii) Salbutamol/ ipratropium bromide/hydrocortisone
 - iv) Early use of BiPAP
 - v) Antibiotics
 - c. Acute pulmonary oedema
 - i) Glycerine Trinitrate
 - ii) Frusemide
 - iii) Morphine
 - iv) CPAP/BiPAP
 - v) ECG and cardiac biomarkers
 - vi) ACE inhibitors and antihypertensives
 - d. Pulmonary Embolus
 - i) VQ vs CTPA
 - ii) Heparin
 - iii) Thrombolysis in massive pulmonary embolus
 - e. Pneumonia
 - i) Antibiotic therapy as per antibiotic guidelines
 - ii) Special consideration in the immunosuppressed and patients in wet tropical areas
- 1.1.30 Differentiate the contribution of pulmonary and cardiac causes of dyspnoea.
- 1.1.31 Perform the following procedures:
- a. Non-invasive ventilation including BiPAP and CPAP
 - b. Positive pressure ventilation
 - c. Insertion of intercostal catheter
 - d. Management of pneumothorax
- 1.1.32 Set up a transport ventilator, using initial settings.
- 1.1.33 Use high-flow nasal prongs

ST	WBA
LSR	PC
SDL	Exam
Exam	

1.2 Advanced Pain Management and Procedural Sedation

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
1.2.1 Methods of pain management including: <ol style="list-style-type: none"> a. Procedural sedation (in an adult and child) b. Regional anaesthesia, including Bier's block c. Chronic pain relief 		
1.2.2 Pharmacology of regional anaesthesia, including: <ol style="list-style-type: none"> a. Pros and cons of use b. Adverse reactions c. Complications 	ST LSR SDL	WBA Exam
1.2.3 Principles of nerve block procedures.		
Be able to:		
1.2.4 Recognise the most appropriate method of pain relief for complex presentations.		
1.2.5 Perform the following procedures: <ol style="list-style-type: none"> a. Femoral nerve block/ Fascia Iliaca block b. Procedural sedation in an adult and child c. Intravenous analgesia d. Other regional nerve block as appropriate 	ST LSR SDL	WBA PC Exam

Unit 2. Managing emergency medicine presentations 2

2.1 Complex Trauma presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.1.1 Principles of initial multi-trauma assessment and management.		
2.1.2 Clinical features and red flags of traumatic head and spinal injury including: <ul style="list-style-type: none"> a. Extradural haemorrhage b. Subdural haemorrhage c. Intracerebral haemorrhage d. Traumatic subarachnoid haemorrhage e. Haematoma f. Diffuse axonal injury 		
2.1.3 Spinal trauma including: <ul style="list-style-type: none"> a. Spinal cord syndromes b. Spinal cord and associated ligamentous injury without bony injury 		
2.1.4 Indications for CT and MRI scanning and bedside ultrasound in trauma patients.	ST LSR SDL WS	WBA Exam
2.1.5 Use of Focused Assessment by Sonography for Trauma (FAST) examination and possible associated problems.		
2.1.6 Local and State Trauma Guidelines for the management, admission and referral of severe trauma patients.		
2.1.7 Legal and forensic considerations relating to inflicted injuries.		
2.1.8 Principles of management of sexual violence		
2.1.9 Techniques for application of a femoral traction splint device.		
2.1.10 Principles of preservation of severed body parts for re-implantation.		
2.1.11 Principles of administration of fluid resuscitation in major trauma including concepts of permissive hypotension, haemostatic resuscitation and massive transfusion.		
2.1.12 Principles of neuroprotective resuscitation.		
2.1.13 Indications for and potential complications of intubation of trauma patients.		
Be able to:		
2.1.14 Initiate appropriate management of identified head injuries, including neuroprotective resuscitation.		
2.1.15 Perform a primary survey with commencement of appropriate initial treatment for the following identified life-threatening injuries: <ul style="list-style-type: none"> a. Exsanguinating haemorrhage b. Airway compromise c. Chest injuries d. Concealed catastrophic haemorrhage e. Disability and focal neurological signs suggesting head or spinal trauma f. Hypothermia or massive burns 	ST LSR SDL WS	WBA Exam

continued....

Be able to:

- 2.1.16 Perform a detailed secondary survey and identify further or occult injuries.
- 2.1.17 Perform an assessment to identify life-threatening injuries to the following body areas:
- Head/ face
 - Neck
 - Chest
 - Abdomen
 - Pelvis
 - Back/ spine
 - Limbs
- 2.1.18 Initiate life-saving treatment when life-threatening injuries are identified.
- 2.1.19 Administer fluid/blood products including massive transfusion and correction of coagulopathy.
- 2.1.20 Choose and interpret images including trauma x-ray series.
- 2.1.21 Diagnose and initiate treatment for:
- Aortic injury
 - Diaphragmatic rupture
 - Pulmonary contusion
 - Myocardial contusion
 - Cardiac tamponade
 - Oesophageal rupture
 - Tracheobronchial injury
 - Penetrating truncal injury
 - Tension pneumothorax
 - Flail chest
 - Massive haemothorax
 - Open pneumothorax
 - Pelvic fracture
 - Sacral fracture
 - Acetabular fracture
 - Coccygeal fracture
- 2.1.22 Undertake the following assessments:
- Spinal cord assessment
 - Examination of the spine (cervical, thoracic and lumbar)
 - Spinal clearance (clinical and radiological)
- 2.1.23 Identify injury to vertebrae (fracture/dislocation and spinal cord).
- 2.1.24 Identify and manage the traumatic abdominal injuries to solid organs and hollow viscera.
- 2.1.25 Stabilise and transfer patient for definitive investigation and management.
- 2.1.26 Lead a trauma team.
- 2.1.27 Manage victim of sexual violence including detecting and treating coexisting injuries, providing psychosocial support, pregnancy and STI prevention, liaising with appropriate people to arrange forensic specimen collection in accordance with local protocol and relevant legislation and arrange appropriate follow up.
- 2.1.28 Perform the following procedures:
- Chest decompression
 - Insertion of intercostal catheter

ST
LSR
SDL
WS

WBA
Exam

2.2 Cardiac presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Be able to:		
2.2.1 Elicit a relevant focused history and undertake a targeted examination for a patient presenting with a cardiac emergency.	ST LSR SDL	WBA Exam
2.2.2 Diagnose the likely cause of cardiac emergency presentations.		

Acute Coronary Syndrome

Demonstrate knowledge and understanding of:		
2.2.3 Clinical features and red flags of pericardial effusion.		
2.2.4 Treatment for acute coronary syndrome including unstable angina/ non-STEMI and STEMI.	ST LSR SDL	WBA Exam
2.2.5 Indications for various relevant investigation(s).		
2.2.6 Referral for angiography.		
2.2.7 Indications for admission or outpatient follow-up.		
Be able to:		
2.2.8 Identify the features of atypical acute coronary syndrome.		
2.2.9 Identify the most appropriate investigation(s) including: <ul style="list-style-type: none"> a. Use of troponin/other serum markers b. Interpretation of ECG findings of STEMI, NSTEMI and STEMI equivalent c. Stress testing d. Echocardiography e. Angiography 	ST LSR SDL	WBA Exam
2.2.10 Provide appropriate treatment including: <ul style="list-style-type: none"> a. Analgesia including GTN and narcotics b. Oxygen therapy when indicated c. Standard anticoagulation drugs including anti-platelet agents and LMW heparin d. Treatment of STEMI by reperfusion including: <ul style="list-style-type: none"> i) Fibrinolysis (including managing complications) ii) Referral for PTCA /stenting 		

continued....

Acute cardiogenic pulmonary oedema**Demonstrate knowledge and understanding of:**

2.2.11 Causes of acute cardiogenic pulmonary oedema including:

- a. Acute ischemia
- b. Acute valve rupture
- c. Altitude sickness
- d. Cor pulmonale

ST
LSR
SDLWBA
Exam

2.2.12 Basic principles of management of congestive cardiac failure.

Be able to:

2.2.13 Choose and request the most appropriate investigation(s) including:

- a. ECG
- b. Chest xray.

2.2.14 Analyse and interpret complex ECG patterns or rhythm strips.

2.2.15 Provide appropriate initial treatment including:

- a. Ventilatory support both non-invasive and invasive
- b. Nitrates (S/L, topical or IVI)
- c. ACE Inhibitors
- d. Frusemide
- e. Analgesia
- f. Anti-platelet agents
- g. Use of inotropes.

ST
LSR
SDLWBA
ExamValvular disorders**Demonstrate knowledge and understanding of:**

2.2.16 Clinical features of valvular disorders and related conditions.

ST
LSR
SDLWBA
Exam**Be able to:**

2.2.17 Identify valvular disorders and conditions associated with valvular disorders.

ST
LSR
SDLWBA
Exam

continued...

Common arrhythmias**Demonstrate knowledge and understanding of:**

2.2.18 Pharmacology and use of common anti-arrhythmic drugs.

2.2.19 Indications, contraindications and complications of:

- a. External transcutaneous pacing
- b. DC Cardioversion
- c. Defibrillation.

ST
LSR
SDL

WBA
Exam

Be able to:

2.2.20 Identify important tachy- and bradyarrhythmias including:

- a. Sick sinus syndrome
 - i) Tachy-bradycardia syndrome
- b. Bundle branch blocks (right, left and hemiblocks)
- c. Heart block (1st, 2nd and 3rd degree)
- d. Supraventricular tachycardia
- e. Broad complex tachycardia
- f. Ventricular tachycardia
- g. Ventricular fibrillation
- h. Pre-excitation syndromes
- i. Long QT Syndrome.

ST
LSR
SDL

WBA
Exam
PC

2.2.21 Identify the most appropriate investigation(s) for common arrhythmias.

2.2.22 Provide appropriate treatment including:

- a. Common anti-arrhythmic drugs (e.g. amiodarone, sotalol, flecainide, digoxin, adenosine)
- b. Vagal manoeuvres in supraventricular tachycardias

2.2.23 Perform the following procedures:

- a. External transcutaneous pacing
- b. DC Cardioversion
- c. Defibrillation.

2.2.24 Recognise when to discontinue resuscitation after cardiac arrest.

ECG changes associated with other conditions**Demonstrate knowledge and understanding of:**

2.2.25 ECG changes due to electrolyte disturbances.

2.2.26 ECG changes due to common poisonings.

2.2.27 ECG changes of "cardiac mimics".

ST
LSR
SDL

WBA
Exam

2.3 Haemodynamic presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.3.1 Principles of invasive haemodynamic monitoring.	ST LSR SDL	WBA Exam
Be able to:		
2.3.2 Elicit a relevant focused history and undertake a targeted examination of a patient presenting with a haemodynamic emergency.		
2.3.3 Choose and request the most appropriate investigation(s) including central venous pressure and arterial blood pressure monitoring.		
2.3.4 Recognise and treat fluid overload.		
2.3.5 Recognise and manage a hypertensive crisis.		
2.3.6 Recognise indications for use of various blood products including: <ul style="list-style-type: none"> a. O negative blood b. Massive transfusion c. Fresh frozen plasma (FFP) d. Platelets (Plat) e. Cryoprecipitate 	ST LSR SDL	WBA PC Exam
2.3.7 Provide appropriate treatment including: <ul style="list-style-type: none"> a. Fluid resuscitation b. Use of blood products c. Inotropic and vasopressor support d. Coronary reperfusion for acute myocardial infarction 		
2.3.8 Perform the following procedures: <ul style="list-style-type: none"> a. Arterial line insertion b. Insertion of rapid infusion catheter (RIC) for rapid fluid resuscitation 		

2.4 Complex neurological presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Be able to:		
2.4.1 Elicit a relevant focussed history and undertake a targeted examination and investigation(s) for a patient presenting with a neurological emergency.	ST LSR SDL	WBA Exam
2.4.2 Diagnose the likely underlying cause of neurological emergency presentations.		

Headache

Demonstrate knowledge and understanding of:		
2.4.3 Principles of lumbar puncture.	ST LSR SDL	WBA Exam
Be able to:		
2.4.4 Perform a lumbar puncture for investigation of a headache.	ST LSR SDL	WBA PC

continued....

Stroke**Demonstrate knowledge and understanding of:**

- | | | | |
|-------|--|------------------|-------------|
| 2.4.5 | Aetiology of stroke including: | | |
| | a. Cerebral thrombosis | | |
| | b. Emboli | | |
| | c. Haemorrhage. | | |
| 2.4.6 | Clinical features of stroke including anatomical distribution and stroke syndromes e.g. MCA, PICA. | ST
LSR
SDL | WBA
Exam |
| 2.4.7 | Clinical features of transient ischaemic attacks and mimics. | | |
| 2.4.8 | Indications for both neurological and neurosurgical consultation. | | |
| 2.4.9 | The importance of early diagnosis and investigation of subarachnoid haemorrhage including: | | |
| | a. CT scan | | |
| | b. Lumbar puncture. | | |

Be able to:

- | | | | |
|--------|--|------------------|-------------|
| 2.4.10 | Identify transient ischaemic attacks. | | |
| 2.4.11 | Choose and request the most appropriate investigation(s) including: | | |
| | a. Non-contrast and contrast CT brain and neck | | |
| | b. MRI brain | | |
| | c. Lumbar puncture. | | |
| 2.4.12 | Identify patients who may benefit from invasive stroke therapy such as clot retrieval. | ST
LSR
SDL | WBA
Exam |
| 2.4.13 | Provide appropriate treatment for all forms of stroke including: | | |
| | a. Early intervention by stroke team | | |
| | b. Appropriate analgesia | | |
| | c. Reperfusion strategy, if appropriate. | | |

Syncope, vertigo and ataxia**Demonstrate knowledge and understanding of:**

- | | | | |
|--------|---|------------------|-------------|
| 2.4.14 | Clinical features and difference between syncope and vertigo. | | |
| 2.4.15 | Clinical features of vertebrobasilar insufficiency. | ST
LSR
SDL | WBA
Exam |
| 2.4.16 | The difference between central and peripheral vertigo. | | |
| 2.4.17 | Risk stratification tools used to diagnose syncope. | | |
| 2.4.18 | The criteria for admission for patients with either syncope or vertigo. | | |

Be able to:

- | | | | |
|--------|---|------------------|-----|
| 2.4.19 | Demonstrate use of the Hallpike test for benign paroxysmal positional vertigo (BPPV). | ST
LSR
SDL | WBA |
| 2.4.20 | Perform an Epley's manoeuvre to treat benign paroxysmal positional vertigo (BPPV). | | |

continued....

Seizures/ epilepsy**Demonstrate knowledge and understanding of:**

2.4.21	Indications for the following investigation(s):	ST	WBA
	a. CT	LSR	Exam
	b. MRI.	SDL	

Be able to:

2.4.22 Assess seizure status including airway control.

2.4.23 Initiate management of seizure.

2.4.24 Initiate management of status epilepticus.

2.4.25 Identify causes of seizures including:

a. Alcohol-related

b. Drugs

c. Post-traumatic

d. Electrolyte and metabolic disturbances.

ST
LSR
SDL

WBA
Exam

2.4.26 Identify the most appropriate investigation(s) for seizures including:

a. Imaging (CT/MRI scan)

2.4.27 Provide appropriate treatment for seizures including:

a. Management of blood glucose

b. Anti-epileptic pharmacological treatment.

Infections**Demonstrate knowledge and understanding of:**

2.4.28	Clinical features of infections that lead to neurological symptoms.	ST	WBA
		LSR	Exam
		SDL	

Acute spinal cord lesions**Demonstrate knowledge and understanding of:**

2.4.29	Clinical features of spinal cord lesions:	ST	WBA
	a. Epidural abscess	LSR	Exam
	b. Transverse myelitis.	SDL	

Movement disorders**Demonstrate knowledge and understanding of:**

2.4.30	Clinical features of Parkinson's disease.	ST	WBA
2.4.31	Characteristics of tardive dyskinesia.	LSR	Exam
2.4.32	Characteristics of dystonia.	SDL	

2.5 Complex psychiatric presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.5.1		
2.5.2		
2.5.3		
2.5.4		
Be able to:		
2.5.5		
2.5.6		
2.5.7		
2.5.8		
2.5.9		
2.5.10		
2.5.11		
2.5.12		
2.5.13		
2.5.14		
	ST LSR SDL	WBA Exam
	ST LSR SDL	WBA Exam

2.6 Advanced paediatric presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Be able to:		
2.6.1 Elicit a relevant focused history and undertake a targeted examination of an ill or injured infant or child.	ST LSR SDL	WBA Exam
2.6.2 Identify children at risk and take steps as appropriate.	WS	

Newborn baby (up to 4 hours old)

Demonstrate knowledge and understanding of:		
2.6.3 The newborn resuscitation algorithm.		
2.6.4 Airway and breathing problems in a newborn.	ST LSR	WBA Exam
2.6.5 Circulation problems in the newborn (bradycardia, cyanosis and shock).	SDL WS	
2.6.6 Depressed muscle tone/movement in the newborn.		
Be able to:		
2.6.7 Identify the clinical features of the following: <ul style="list-style-type: none"> a. Airway and breathing problems in a newborn b. Circulation problems in a newborn (bradycardia, cyanosis and shock) c. Depressed muscle tone/movement in the newly born. 		
2.6.8 Participate in resuscitation in the newborn.		
2.6.9 Investigate the newborn for abnormalities during and immediately after resuscitation, including: <ul style="list-style-type: none"> a. Blood glucose and blood gas investigation b. Chest x-ray interpretation (heart and lung problems e.g. cardiomegaly, pneumothorax post resuscitation). 	ST LSR SDL WS	WBA PC Exam
2.6.10 Select appropriate resuscitation fluid and administer drugs appropriately, including calculation of doses/volume (particularly focusing on 0.9% saline, 10% dextrose, adrenaline and naloxone administration).		
2.6.11 Provide post resuscitation care, including temperature control and nutritional/fluid support.		
2.6.12 Interpret APGAR score.		
2.6.13 Manage and support airway and breathing in a newborn including: <ul style="list-style-type: none"> a. airway suction b. bag ventilation c. CPAP device 		
2.6.14 Perform CPR in a newborn.		

continued....

Ill infant (up to 2 years old) or child (above 2 years old)**Demonstrate knowledge and understanding of:**

2.6.15 Signs of serious illness in an ill infant or child:

- a. Abnormal colour e.g. cyanosis, pallor, jaundice, purpura/petechiae
- b. Decreased neurological responsiveness
- c. Abnormal temperature
- d. Decreased oral intake or urine output
- e. Weight loss
- f. Projectile vomiting
- g. Blood-stained vomit

ST	
LSR	WBA
SDL	Exam
WS	

2.6.16 Technique for endotracheal intubation in an infant and child.

Be able to:

2.6.17 Recognise signs of serious illness in an infant or child.

2.6.18 Identify the clinical features of the following:

- a. Paediatric cardiopulmonary arrest
- b. Respiratory distress
 - i) upper and lower airway causes
- c. Circulation collapse
- d. Common arrhythmias
- e. Congenital heart disease
- f. Septic child
- g. Altered level of consciousness including:
 - i) Afebrile seizure
 - ii) Hypoglycaemia
- h. Apparent life-threatening event
- i. Abdominal pain
 - i) organic
 - ii) functional
- j. Trauma in children
- k. Child with a limp
- l. Feeding problems in the infant
- m. Excessive crying in the infant

ST	
LSR	WBA
SDL	PC
WS	Exam

2.6.19 Choose, request and interpret the most appropriate investigation(s) including:

- a. Paediatric radiology
- b. Appropriate phlebotomy and pathology investigation(s) (biochemistry, haematology, micro)
- c. CSF and joint fluid analysis

2.6.20 Provide appropriate treatment including:

- a. IV fluid therapy including type and rate
- b. Drug therapy including antibiotics and analgesics

2.6.21 Set up a ventilator for a child using initial settings.

2.6.22 Perform the following procedures:

- a. Bag mask ventilation
- b. Endotracheal intubation
- c. Defibrillation and cardioversion (electrical and chemical)
- d. Septic screening e.g. blood culture or sterile urine collection
- e. Circulation access and blood sampling including intraosseous access and arterial blood sampling

Injured infant or child**Demonstrate knowledge and understanding of:**

2.6.23 Clinical features of:

- a. Minor head trauma and concussion
- b. Chest and abdominal trauma
- c. Common paediatric soft tissue injuries
- d. Limb injury with and without neurovascular compromise
- e. Salter-Harris fractures
- f. Injuries to the carpal bone complex
- g. Open fractures

ST	
LSR	WBA
SDL	Exam
WS	

Be able to:

2.6.24 Identify and manage:

- a. Minor head trauma and concussion
- b. Chest and abdominal trauma
- c. Common paediatric soft tissue injuries (simple lacerations)
- d. Limb injury with and without neurovascular compromise
- e. Salter-Harris fractures
- f. Injuries to the carpal bone complex
- g. Open fractures

2.6.25 Choose, request and interpret the most appropriate investigation(s), including radiology.

ST	
LSR	WBA
SDL	PC
WS	Exam

2.6.26 Provide appropriate treatment including:

- a. Analgesia
- b. Drug treatment
- c. IV fluid
- d. Limb immobilisation techniques
- e. Appropriate reduction of fracture/dislocation with neurovascular compromise.

2.6.27 Perform procedural sedation.

2.6.28 Arrange observation in ED or short stay admission as required.

2.7 Infectious disease presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.7.1 Aetiology of common infectious diseases including STIs, in particular those that are notifiable.		
2.7.2 Appropriate prophylactic regimes e.g. including contact tracing in meningococcus, chlamydia etc.	ST LSR	WBA Exam
2.7.3 Indications for cultures, microscopy, serology and PCR testing.	SDL	
2.7.4 Principles for performing an ascitic tap.		
2.7.5 Use of personal protective equipment (PPE) for self and staff.		
Be able to:		
2.7.6 Elicit a relevant focused history and undertake a targeted examination for a patient presenting with an infectious disease.		
2.7.7 Identify those patients whose presentation is due to infectious disease.		
2.7.8 Identify those patients who are immunocompromised and have atypical presentation of infection.		
2.7.9 Recognise sepsis and/ or sepsis shock and commence appropriate interventions.		
2.7.10 Choose, request and interpret the most appropriate investigation(s) including: <ul style="list-style-type: none"> a. Cultures b. Microscopy c. Serology d. PCR testing 		
2.7.11 Provide appropriate treatment including: <ul style="list-style-type: none"> a. Antibiotics b. Supportive therapy c. Infectious disease consultation 	ST LSR SDL	WBA PC Exam
2.7.12 Perform the following procedures: <ul style="list-style-type: none"> a. Suprapubic bladder aspiration b. Joint aspiration c. Blood culture collection 		
2.7.13 Demonstrate appropriate counselling skills for patients diagnosed with or potentially having infectious diseases with: <ul style="list-style-type: none"> a. social implications b. mortality/morbidity implications 		
2.7.14 Refer patients as appropriate.		
2.7.15 Respond actively to common public health initiatives that impact on emergency medicine, including pandemics and novel infectious diseases		

2.8 Renal, endocrine and metabolic presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.8.1 Clinical features of renal, endocrine and metabolic and emergency presentations.	ST LSR SDL	WBA Exam
2.8.2 Principles of assessment and management of renal, endocrine and metabolic emergency presentations.		
Be able to:		
2.8.3 Elicit a relevant focused history and undertake a targeted examination for a patient presenting with an renal, endocrine and metabolic presentations.		
2.8.4 Diagnose the likely underlying cause of renal, endocrine and metabolic emergency based on the clinical features of: <ul style="list-style-type: none"> a. Diabetic ketoacidosis b. Hyperglycemic hypersomolar state c. Hypoglycaemia d. Hyperglycaemia e. Addisonian crisis f. Thyrotoxicosis g. Myxoedema coma h. Renal failure i. Acid based disturbances j. Disturbance in sodium, potassium, calcium 	ST LSR SDL	WBA Exam
2.8.5 Choose, request and interpret the most appropriate investigation(s) including: <ul style="list-style-type: none"> a. Measurement and interpretation of venous blood gas 		
2.8.6 Commence initial treatment for renal, endocrine and metabolic emergencies including: <ul style="list-style-type: none"> a. Treatment of hyperglycaemic diagnoses b. Emergency therapies for endocrine deficiency and excess c. Treatment of sodium, potassium and other electrolyte derangements d. Treatment of acute renal failure 		
2.8.7 Initiate referral for complex paediatric metabolic derangement.		
2.8.8 Recognise and appropriately respond to indications for urgent dialysis.		
2.8.9 Recognise and respond appropriately to common complications in dialysis patients.		

2.9 Musculoskeletal presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.9.1 Clinical features of complex musculoskeletal emergencies.		
2.9.2 Clinical features of joint inflammation.		
2.9.3 Principles for assessment and management of the inflamed joints.	ST	
2.9.4 Principles of assessment and management of musculoskeletal emergencies.	LSR	WBA
2.9.5 Fractures that pose a risk of severe underlying injury and complications, particularly in elderly and paediatric patients.	SDL	Exam
2.9.6 Potential nerve and vascular complications of dislocations.		
Be able to:		
2.9.7 Elicit a relevant focused history and undertake a targeted examination for a patient presenting with a complex musculoskeletal emergency.		
2.9.8 Diagnose the likely underlying cause of musculoskeletal emergency presentations based on the clinical features of: <ul style="list-style-type: none"> a. Complex soft tissue injury including: <ul style="list-style-type: none"> i) crush injuries ii) high pressure injection injuries b. Compartment syndrome c. Superficial and deep space hand infections d. Major joint dislocations e. Gout f. Auto-immune disease g. Acute rheumatic fever h. Septic joints 		
2.9.9 Choose, request and interpret the most appropriate investigation(s) for the inflamed joint, including aspiration.		
2.9.10 Choose, request and interpret the most appropriate investigation(s) for complex musculoskeletal emergencies.	ST LSR SDL	WBA Exam
2.9.11 Provide appropriate treatment including: <ul style="list-style-type: none"> a. Reduction b. Plaster c. Drainage d. Anti-inflammatory medication 		
2.9.12 Perform reductions of limb fractures and major joint dislocation requiring treatment (on either an adult or child).		
2.9.13 Consider potential underlying injuries and/or age-related complications and appropriately manage: <ul style="list-style-type: none"> a. rib fractures b. sternal fracture c. L1 Chance fracture d. vertebral fractures e. extremity injuries f. compartment syndrome 		
2.9.14 Arrange surgical referral as necessary.		

2.10 Complex obstetric and gynaecological presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.10.1 Indications for cardiotocography (CTG).		
2.10.2 Indications and procedures for vaginal and other gynaecological swabs.		
2.10.3 Clinical features of:		
a. Pelvic inflammatory disease	ST	WBA
b. Trauma in pregnancy	LSR	Exam
c. Antepartum, intrapartum and postpartum haemorrhage	SDL	
d. Miscarriage		
e. Hyperemesis gravidarum		
f. Premature labour		
Be able to:		
2.10.4 Elicit a relevant focused history and undertake an appropriate examination for a patient presenting with a complex obstetric or gynaecological emergency.		
2.10.5 Diagnose the likely underlying cause of obstetric and gynaecological emergency presentations.		
2.10.6 Identify the clinical features and red flags of:		
a. Pelvic inflammatory disease		
b. Trauma in pregnancy		
c. Antepartum, intrapartum and postpartum haemorrhage		
d. Miscarriage	ST	WBA
e. Hyperemesis gravidarum	LSR	Exam
f. Premature labour	SDL	
2.10.7 Seek appropriate assistance for premature labour.		
2.10.8 Safely and appropriately, examine the pregnant abdomen.		
2.10.9 Initiate empirical treatment of likely gynaecological diagnoses including pelvic inflammatory disease.		
2.10.10 Initiate management of obstetric and gynaecological presentation.		
2.10.11 Refer to obstetric and gynaecological specialist as required.		

2.11 Advanced toxicological and toxinological presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.11.1 Clinical features of toxidromes including: <ol style="list-style-type: none"> Anticholinergic Hypoglycaemia Sodium channel blockade Calcium channel blocker toxicity Spider and snakebite 		
2.11.2 Indications, contraindications and complications of common antidotes and antivenoms including: <ol style="list-style-type: none"> Atropine Calcium Flumazenil glucagon N Acetyl cysteine Naloxone Octreotide Physostigmine Pralidoxime Sodium Bicarbonate Vitamin K 	ST LSR SDL	WBA Exam
2.11.3 The modalities, indications, contraindications and complications of techniques used in management of the poisoned patient including: <ol style="list-style-type: none"> decontamination enhanced elimination antidote therapy 		
2.11.4 Specific management of locally relevant: <ol style="list-style-type: none"> snake and spider bites marine envenomation arachnid envenomation 		
Be able to:		
2.11.5 Elicit a relevant focussed history and undertake an appropriate examination for a patient presenting with an advanced toxicological and toxinological emergency.		
2.11.6 Diagnose the likely underlying cause of toxicological and toxinological emergency presentations.		
2.11.7 Safely administer antidotes and antivenoms in consultation with a toxicologist as required.	ST LSR SDL	WBA PC Exam
2.11.8 Appropriately manage: <ol style="list-style-type: none"> Snake and spider bites Marine envenomation Arachnid envenomation 		
2.11.9 Interpret ECG in a poisoned patient.		

2.12 Ear, Nose and Throat (ENT) presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.12.1 Clinical features of common ear, nose and throat (ENT) emergency presentations.	ST LSR SDL	WBA Exam
Be able to:		
2.12.2 Elicit a relevant focused history and undertake an appropriate examination for a patient presenting with an ear, nose and/or throat (ENT) emergency.		
2.12.3 Diagnose the likely underlying cause of ear, nose and throat (ENT) emergency presentations based on the clinical features and red flags of: <ul style="list-style-type: none"> a. Epistaxis b. Quinsy c. Nasal foreign bodies d. Mastoiditis e. Retropharyngeal abscess f. Epiglottitis g. Post-tonsillectomy bleed or infection h. Dental emergencies 	ST LSR SDL	WBA PC Exam
2.12.4 Choose and request the most appropriate investigation/s for ear, nose and throat ENT emergency presentations.		
2.12.5 Perform the following procedures: <ul style="list-style-type: none"> a. Nasal packing (anterior and posterior) b. Silver nitrate cautery of anterior epistaxis c. Removal of foreign bodies from ear and nose (including indications for removal under anaesthesia) d. Administration of local anaesthesia 		
2.12.6 Refer patient as needed.		

Unit 3. Professional practice in the emergency care environment

3.1 Rural and remote emergency medicine 2

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.1.1		
3.1.2		
3.1.3		
3.1.4		
3.1.5		
a.	ST LSR SDL	WBA Exam
b.		
3.1.6		
3.1.7		
3.1.8		
3.1.9		
Be able to:		
3.1.10		
3.1.11		
3.1.12	ST LSR SDL	WBA Exam
3.1.13		
3.1.14		

3.2 Professional and ethical practice

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.2.1 National codes relating to good professional and ethical practice: <ul style="list-style-type: none"> a. Conflict of interest b. Confidentiality 		
3.2.2 Identifying strengths and limitations in self as well as in others.	ST	SPM
3.2.3 Self-reflection on scopes of practice and competency.	LSR	RM
3.2.4 Sources of professional feedback.	SDL	WBA
3.2.5 The impact of behaviour on others in the workplace.		Exam
3.2.6 The effect of stress on own behaviour.		
Be able to:		
3.2.7 Demonstrate consistently high standards when carrying out responsibilities and commitments.		
3.2.8 Uphold personal and professional ethics and values that: <ul style="list-style-type: none"> a. consider the values of the organization b. respect the culture, beliefs and abilities of individuals. 		
3.2.9 Obtain and analyse professional feedback from a variety of sources.	ST	WBA
3.2.10 Effectively self-evaluate personal scope of practice and competence.	LSR	RM
3.2.11 Appropriately adjust behaviour in response to feedback and reflection.	SDL	SPM
3.2.12 Value, respect and promote equality and diversity in the workplace.		
3.2.13 Demonstrate effective professional behaviours.		
3.2.14 Take appropriate actions if ethics and values are compromised.		

3.3 Advanced Communication

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.3.1 Effective strategies for communication in complex scenarios including: <ol style="list-style-type: none"> a. Psychiatric b. Sexual assault c. Domestic violence d. End of life issues e. Disclosure f. Error or adverse events g. Adolescent patients h. Patients with impairment to communication 	ST LSR SDL	WBA Exam
3.3.2 Principles of safe and effective communication with an aggressive patient and/or in challenging patient scenarios.		
3.3.3 Techniques for communicating with diverse cultural groups in highly stressful situations.		
3.3.4 Principles of effective communication in conflict situations involving: <ol style="list-style-type: none"> a. carers b. ancillary staff 		
Be able to:		
3.3.5 Communicate effectively with a patient in all aspects of a consultation: <ol style="list-style-type: none"> a. history taking b. examination c. assessment d. transfer 		
3.3.6 Demonstrate effective communication in the following mediums: <ol style="list-style-type: none"> a. face-to-face b. phone c. email 		
3.3.7 Display the use of effective verbal and non-verbal communication skills in a challenging patient scenario.	ST LSR SDL	WBA Exam RM
3.3.8 Tailor communication to both the patient and the situation.		
3.3.9 Listen to others and show respect for the views of staff, patients and carers.		
3.3.10 Respect the patient and carer's involvement in healthcare delivery.		
3.3.11 Use appropriate communication tools for efficient consultation, referral and transport.		
3.3.12 Demonstrate effective communication with parent/carer and patient regarding diagnosis and management plans, including follow up.		
3.3.13 Demonstrate self-reflective practice when contemplating one's own implicit bias.		

3.4 Management of the daily ED

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.4.1 Factors that impact on patient flow in an emergency department.	ST	WBA
3.4.2 The impact of surges on the emergency department.	LSR	Exam
3.4.3 Situational awareness in the emergency department	SDL	RM
Be able to:		
3.4.4 Implement strategies to assist in improving patient flow.		
3.4.5 Adopt techniques used to manage patient surges.		
3.4.6 Demonstrate ability to multi-task to manage situations in the emergency department.	ST	WBA
3.4.7 Demonstrate situational awareness.	LSR	Exam
3.4.8 Support colleagues in the ED after a stressful event.	SDL	RM
3.4.9 Role model good behaviour		
3.4.10 Respond to bedside complaints from patient		

Emergency Medicine Advanced Diploma

EMAD Key

Abbreviation	Meaning
ST	Supervised training
LSR	eLearning Module
WS	Workshops
SDR	Self-Directed Learning
PC	Procedural Checklist
SPM	Start of Placement Meeting
RM	Reflection Meeting
Exam	Online MCQ examination
WBAs	Workplace-based Assessments
Mini-CEX	Mini-Clinical Evaluation Exercise
DOPS	Direct Observation of Procedural Skills
QA	Clinical pathway/guideline/ policy update or development or Morbidity and Mortality meeting presentation or Audit
DOCS	Direct Observation of Communication Skills
CLSR	Clinical Lead Shift Report

EMAD Units, teaching and learning strategies, and assessment

Unit	Teaching and learning strategies	Assessment strategies
Unit 1 Advanced techniques in emergency medicine	+ ST + LSR + WS + SDL	+ Mini-CEX + DOPS + CLSR + PC + DOCS + Exam
Unit 2 Managing emergency presentations 3	+ ST + LSR + SDL	+ Mini-CEX + DOPS + CLSR + PC + DOCS + Exam
Unit 3 Professional leadership in the emergency care environment	+ ST + LSR + WS + SDL	+ Mini-CEX + DOPS + CLSR + PC + QA + DOCS + SPM + RM + Exam

EMAD Workshops

Trainees are required to complete the following workshops:

- + Ultrasound workshop relevant to the curriculum.
- + ACEM EMCD Supervisor Course

eLearning Modules

The Indigenous Health and Cultural Competency Modules are required for all trainees. Other eLearning Modules included in the Learning Support Resources are highly recommended.

EMAD Units and themes

Unit	Themes
Unit 1 Advanced techniques in emergency medicine	<ul style="list-style-type: none"> + Resuscitation medicine 3 + Ultrasound in resuscitation
Unit 2 Managing emergency presentations 3	<ul style="list-style-type: none"> + Environmental injury + Complex skin/soft tissue injury/burns + Complex ophthalmological + Rare infectious disease + Complex toxicological and toxinological + Choosing wisely
Unit 3 Professional leadership in the emergency care environment	<ul style="list-style-type: none"> + Emergency health care in rural and remote context + Emergency retrieval, transportation and patient transfer + Quality assurance improvement and innovation + Leadership and management + Disaster management principles + Collaboration within the whole hospital environment + Decision making and patient safety + Supervision and teaching + The reflective clinician + Evidence based approach to emergency medicine practice

EMAD Assessment Methods

Tool	What is assessed?	Methodology
Mini-CEX	History taking, examination, clinical synthesis, communication, professionalism, organisation and efficiency based on any three high complexity presentations relating to the themes of the EMC, EMD or EMAD	Three 15-20 mini-CEX observed and assessed by an approved assessor*. Complexity is determined using a complexity calculator
DOPS	Ability to safely and appropriately perform the following core procedures: <ul style="list-style-type: none"> + Ventilator - assessment, adjustment and trouble shooting e.g. alarms. + US guided peripheral vascular access + Central venous access 	Three DOPS completed for designated procedures, observed and assessed by an approved assessor*. For this assessment this may include a registered specialist medical practitioner whose area of speciality relates to the applicable area of clinical practice. In the case of the latter the trainee's Primary Supervisor must approve the completed assessment.
Quality Improvement (QI)	Trainee's capacity for undertaking and reflecting on quality improvement strategies, e.g. audit, clinical pathway/guideline/policy update or development, presentation at morbidity and mortality meeting.	One quality improvement activity assessed by an approved assessor* as required for the task selected.
Direct Observation of Communication Skills (DOCS)	Assessment on essential communication skills pertaining to the clinical handover and/or referral of a patient	One clinical referral observed and assessed by an approved assessor*.
Clinical Lead Shift Report (CLSR)	Competence to effectively lead, oversee and manage the Emergency Department including patient flow, staff management, handover and seizing teaching opportunities	Two clinical lead shift reports. Assessed by an approved assessor* who: <ul style="list-style-type: none"> + observes and assesses the trainee + may obtain feedback from other ED staff (e.g.nurses) + provides feedback to the trainee
Procedural Checklist (PC)	Ability to safely and appropriately perform procedures	Each procedure must be signed-off by an approved assessor*. For this assessment this may include a registered specialist medical practitioner whose area of speciality relates to the applicable area of clinical practice. Once the full PC has been completed, the Primary Supervisor must 'sign-off' the completed checklist.
Start of Placement Meeting (SPM)	Conducted in the first two weeks of training for trainee to consider on: <ul style="list-style-type: none"> + Learning needs and goals + Strengths and weaknesses + Possible challenges in training + The process of self-reflection during training 	30-minute Start of placement meeting between the trainee and the Primary Supervisor.
Reflection Meeting (RM)	Critically reflect upon training at approximately 3 calendar month intervals	45-minute reflection meeting between the trainee and the Primary Supervisor
Examination	Multiple-choice questions (MCQs) related to the curriculum.	Online multiple-choice (MCQ) examination conducted under supervision

* For the definition of an 'approved assessor', refer to the Approved Assessor Matrix, in the [Training handbook](#).

Unit 1. Advanced techniques in emergency medicine

1.1 Resuscitation medicine 3

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
1.1.1 Principles of rapid sequence intubation (RSI) in a physiologically challenging patient.		
1.1.2 Principles of rapid sequence intubation (RSI) in a child.		
1.1.3 Anatomical and physiological challenges of resuscitating a child.	ST	WBA
1.1.4 Advanced techniques for airway management in an adult and child.	LSR	Exam
1.1.5 Seldinger technique for vascular access procedures.	SDL	
1.1.6 Principles of central venous access.		
1.1.7 Principles of umbilical artery or vein catheterisation.		
Be able to:		
1.1.8 Lead a team in a straightforward newborn resuscitation .		
1.1.9 Seek advice when first line resuscitation methods fail in newborn resuscitation.		
1.1.10 Manage anatomically challenging airways in adults and children.		
1.1.11 Manage complications in resuscitation including acting on pre-discussed plan with team for “can’t intubate, can’t oxygenate” scenarios.		
1.1.12 Recognise resuscitation presentations where ongoing resuscitation may be futile.		
1.1.13 Explain the decisions regarding medical management and the goals of end of life care to a patient and their family/whānau and/or carers.		
1.1.14 Take responsibility for ceasing resuscitation appropriately in a complex presentation.		
1.1.15 Decide on appropriate goals of care and limitation of medical treatment for a dying patient.		
1.1.16 Deliver appropriate end-of-care palliative care to a patient who is dying in the ED.	ST	WBA
1.1.17 Sensitive elicit patient’s and carer wishes regarding organ donation where appropriate in the ED.	LSR	PC
1.1.18 Adjust and trouble shoot in a ventilated patient.	SDL	Exam
1.1.19 Adapt resuscitation skills when first line measures are not successful.		
1.1.20 Perform the following procedures:		
a. RSI in a child		
b. Complex RSI in an adult (e.g., with one complicating factor)		
c. Insert a central venous line		
d. Obtain IV access in the newborn		
e. Endotracheal Intubation with:		
i) C-spine immobilization		
ii) Use of a Bougie		
f. Emergency front of neck access as appropriate for age.		

1.2 Ultrasound in resuscitation

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
1.2.1 Physics of ultrasound waves.		
1.2.2 Ultrasound image optimisation.		
1.2.3 Common artefact production.		
1.2.4 Ultrasound machine controls.		
1.2.5 Normal anatomy as viewed in ultrasound images, as pertains to: <ul style="list-style-type: none"> a. eFAST b. Abdominal aortic aneurysm (AAA) 		
1.2.6 Pathologies as viewed in ultrasound images.		
1.2.7 Principles of common bedside ultrasound skills used in resuscitation assessment, including: <ul style="list-style-type: none"> a. eFAST b. AAA assessment 	ST LSR SDL WS	WBA Exam
1.2.8 Indications, limitations and complications of eFAST and AAA.		
1.2.9 Indications, advantages, limitations and complications of ultrasound guidance procedures: <ul style="list-style-type: none"> a. Insertion of peripheral IV cannula b. Central venous access c. Femoral nerve block 		
1.2.10 Ultrasound credentialing and appropriate documentations.		
Be able to:		
1.2.11 Perform the following ultrasound assessments: <ul style="list-style-type: none"> a. eFAST b. AAA assessment 	ST LSR SDL WS	WBA PC
1.2.12 Perform the following ultrasound-guided procedures: <ul style="list-style-type: none"> a. Insertion of peripheral IV cannula b. Central venous access c. Femoral nerve block 		

Unit 2. Managing emergency presentations 3

2.1 Highly complex emergency presentations

Structural heart disease

Learning Objective	T and L Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.1.1 Clinical features of structural heart disease.	ST LSR SDL	WBA Exam
Be able to:		
2.1.2 Initiate appropriate treatment and refer as necessary.	ST LSR SDL	WBA Exam

Complex trauma

Demonstrate knowledge and understanding of:		
2.1.3 Principles of management of complex multi-trauma in special circumstances, including pregnant, paediatric and geriatric patients.	ST LSR SDL	WBA Exam
Be able to:		
2.1.4 Assess and manage complex trauma in special subpopulations, including pregnant, paediatric and geriatric patients.	ST LSR SDL	WBA PC Exam
2.1.5 Insert an intercostal catheter.		

Complex metabolic and endocrine

Demonstrate knowledge and understanding of:		
2.1.6 Clinical features of complex metabolic and endocrine emergency presentations.	ST LSR SDL	WBA Exam
Be able to:		
2.1.7 Identify paediatric errors of metabolism, resuscitate and initiate investigation in conjunction with a paediatric department.	ST LSR SDL	WBA Exam

Complex obstetrics and gynaecological

Demonstrate knowledge and understanding of:		
2.1.8 Complications of labour and delivery and principles of their management including:		
a. Causes of premature labour	ST	
b. Retained placenta	LSR	WBA
c. Primary and secondary postpartum haemorrhage	SDL	Exam
d. Endometritis		
e. Retained products of conception		

Complex paediatric

Demonstrate knowledge and understanding of:		
2.1.9 Indications, contraindications and complications of a lumbar puncture in a child.	ST LSR SDL	WBA Exam

2.2 Rare infectious disease presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.2.1		
2.2.2		
2.2.3		
2.2.4	ST LSR SDL	WBA Exam
2.2.5		
Be able to:		
2.2.6	ST LSR SDL	WBA Exam
2.2.7		

2.3 Environmental injury presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Be able to:		
2.3.1 Elicit a focused history and conduct a targeted examination of a patient presenting with environmental related injury/condition.	ST LSR SDL	WBA Exam
2.3.2 Measure core temperature.		

Electrical injury

Demonstrate knowledge and understanding of:		
2.3.3 Clinical features of electrical injuries.		
2.3.4 Patterns of electrical injury associated with:		
a. AC and DC Injury		
b. Household versus high voltage injuries including:		
i) Arrhythmias	ST	WBA
ii) Cardiac injury	LSR	Exam
iii) Neurological deficit	SDL	
iv) Deep burns		
v) Compartment syndromes and rhabdomyolysis		
vi) High risk settings e.g. pregnancy		
vii) Associated other injuries (e.g. trauma)		
Be able to:		
2.3.5 Recognise the clinical features of an electrical injury.		
2.3.6 Assess and manage patients with electrical injury and their associated acute sequelae.	ST LSR SDL	WBA Exam
2.3.7 Choose and request the most appropriate investigation(s).		
2.3.8 Provide appropriate treatment for patient with an electrical injury.		

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Immersion injury

Demonstrate knowledge and understanding of:

2.3.9	Clinical features of immersion injuries.	ST LSR SDL	WBA Exam
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Be able to:

2.3.10 Recognise the clinical features of an immersion injury.

2.3.11 Assess and provide appropriate treatment for:

- a. Drowning
- b. Hypothermia
- c. Acute lung injury
- d. Arrhythmias
- e. Metabolic disturbance

ST LSR SDL	WBA Exam
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2.3.12 Choose and request the most appropriate investigation(s).

2.3.13 Identify associated patterns of injury and presentation including trauma, suicide and intoxication.

Hypothermia

Demonstrate knowledge and understanding of:

2.3.14	Clinical features of hypothermia.	ST LSR SDL	WBA Exam
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Be able to:

2.3.15 Recognise the clinical features of hypothermia.

2.3.16 Classify severity of hypothermia.

2.3.17 Minimise patient disturbance to avoid complications.

2.3.18 Conduct relevant metabolic and endocrine assessments.

2.3.19 Choose and request the most appropriate investigation(s).

2.3.20 Interpret ECG findings.

2.3.21 Differentiate "hypothermic" from "dead".

2.3.22 Provide appropriate treatment including:

- a. Passive and active warming techniques, with consideration of complications.
- b. Rapid cooling via external and internal techniques.

ST LSR SDL	WBA Exam
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Hyperthermia

Demonstrate knowledge and understanding of:

2.3.23	Clinical features of hyperthermia.	ST LSR SDL	WBA Exam
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Be able to:

2.3.24	Recognise the clinical features of hyperthermia.		
2.3.25	Assess with consideration of sepsis, metabolic and endocrine disturbance causes.		
2.3.26	Choose and request the most appropriate investigation(s).	ST LSR SDL	WBA Exam
2.3.27	Provide appropriate treatment including: <ul style="list-style-type: none"> a. Rapid cooling via external and internal techniques b. Fluid management c. Antidotes e.g. dantrolene 		

Hyperbaric injuries

Demonstrate knowledge and understanding of:

2.3.28	Clinical features of hyperbaric injuries.	ST LSR SDL	WBA Exam
2.3.29	Rationale for oxygen therapy.		
2.3.30	Local and national referral patterns for hyperbaric related injury.		

Be able to:

2.3.31	Diagnose: <ul style="list-style-type: none"> a. hyperbaric injuries and complications b. barotrauma including neurological respiratory and joint manifestations 	ST LSR SDL	WBA Exam
2.3.32	Choose and request the most appropriate investigation(s).		
2.3.33	Provide appropriate treatment for: <ul style="list-style-type: none"> a. hyperbaric injuries and complications b. barotrauma including neurological respiratory and joint manifestations 		

2.4 Complex wound presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.4.1 Issues associated with concurrent complex wounds and fractures.		
2.4.2 Complex wound contaminants (e.g. chemicals, coral, tropical bites (human or animal)).	ST	WBA
2.4.3 Unusual infections (e.g. saltwater, fresh water, flooding).	LSR	Exam
2.4.4 Imaging modalities for foreign bodies.	SDL	
2.4.5 Appropriateness of different suturing materials and dressings.		
Be able to:		
2.4.6 Elicit a focused history and conduct targeted examination of a patient presenting with complex wounds.		
2.4.7 Undertake appropriate assessment for vascular, neurological or tendon injury.		
2.4.8 Identify the need for appropriate antibiotic cover, exploration and debridement in the operating theatre.		
2.4.9 Perform the following procedures:		
a. Regional nerve blocks including femoral nerve block	ST	WBA
b. Incision and drainage of abscess	LSR	PC
c. Multi-layer wound closure	SDL	Exam
d. Suture special wounds (e.g. lips)		
2.4.10 Manage complex wounds including:		
a. imaging		
b. dressing/suturing		
c. surgical referral		

2.5 Complex burn presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.5.1 Clinical features of <ol style="list-style-type: none"> Chemical burns Electrical burns Sunburn Thermal burn 		
2.5.2 Team and multidisciplinary nature of complex burn management.	ST	WBA
2.5.3 Implications of complex burns for the calculation of fluid requirements.	LSR	Exam
2.5.4 Appropriate treatment for complex burns.	SDL	
2.5.5 Methods of analgesia for complex burns e.g. opiates, patient controlled analgesia, ketamine.		
2.5.6 Indications and pathways for referral to burns centres for management.		
2.5.7 The indications and techniques for performing an escharotomy.		
2.5.8 Appropriate transport dressings for burns.		
Be able to:		
2.5.9 Elicit a focused history and conduct targeted examination of a patient presenting with complex burns.		
2.5.10 Identify the clinical features of: <ol style="list-style-type: none"> Chemical burns Electrical burns Sunburn Thermal burn 		
2.5.11 Choose and provide appropriate management and treatment for complex burns that includes: <ol style="list-style-type: none"> Airway management Fluid resuscitation Management of associated intoxication e.g. carbon monoxide and cyanide 		
2.5.12 Carry out fluid calculations and replacement in an adult and child.	ST	WBA
2.5.13 Use appropriate tools for calculating burn surface area and adjust for complicating factors and age.	LSR SDL	PC Exam
2.5.14 Recognise and appropriately manage special circumstances of some chemical burns e.g. hydrofluoric acid and hypocalcaemia.		
2.5.15 Recognise the risk of airway injury in some major burns patients and the need for early intubation.		
2.5.16 Recognise the risk of associated phenomena e.g. inhaled toxins/gases.		
2.5.17 Recognise the risk of associated non-burn trauma.		
2.5.18 Choose and request the most appropriate investigation(s) for a patient presenting with complex burns.		
2.5.19 Provide appropriate treatment including: <ol style="list-style-type: none"> Analgesia e.g. Opiates, patient controlled analgesia (PCA), ketamine Prophylaxis measures for peptic ulcer and tetanus Dressing Cooling 		

2.6 Complex ophthalmological presentations

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.6.1 Clinical features of: <ol style="list-style-type: none"> a. Hyphema b. Keratitis c. Ocular burns d. Globe injury e. Ophthalmological complications of facial fractures f. Optic nerve injury g. Lacrimal duct injuries h. Sudden loss of vision i. Vitreous haemorrhage j. Glaucoma 	ST LSR SDL	WBA Exam
Be able to:		
2.6.2 Elicit a focused history and conduct a targeted examination of a patient presenting with a complex ophthalmological emergency.	ST	
2.6.3 Diagnose the likely cause of an ophthalmological emergency.	LSR	WBA
2.6.4 Choose the most appropriate investigation(s) and provide appropriate treatment including referral.	SDL	Exam

2.7 Complex toxicological and toxinological presentations

Learning Objective	Teaching and Learning Strategies	Assessment
<i>Demonstrate knowledge and understanding of:</i>		
2.7.1 Less common toxidromes including: <ol style="list-style-type: none"> a. Cholinergic b. Salicylate c. Serotonergic syndrome d. Neuroleptic malignant syndrome 	ST LSR SDL	WBA Exam
2.7.2 Management of withdrawal syndromes and their complications (opioid, ethanol alcohol (ETOH), benzodiazepines, amphetamines).		

2.8 Choosing wisely

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
2.8.1 Principles of choosing wisely.		
2.8.2 Common drivers for over testing.		
2.8.3 Risks associated with over testing, including: <ul style="list-style-type: none"> a. increase cost b. issues with interpretation c. overdiagnosis d. patient harm 	ST LSR SDL	WBA Exam
2.8.4 Resources available to assist with determining the appropriateness and necessity of an investigation, test, treatment or procedure.		
2.8.5 Practical systems to ensure rational ordering of investigation(s) by medical staff.		
Be able to:		
2.8.6 Apply principles of choosing wisely to clinical practice to provide safe and highest standard of patient care in the Emergency Department.		
2.8.7 Rationalise and justify investigation, test, treatment or procedure.	ST LSR SDL	WBA Exam
2.8.8 Demonstrate rational decision making in imaging.		
2.8.9 Demonstrate rational requesting of pathology testing.		

Unit 3. Professional leadership in the emergency care environment

3.1 Rural and remote emergency medicine 3

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.1.1 The spectrum of emergencies likely to be encountered in a rural and remote setting.		
3.1.2 The impact of rural and remote attitudes which may delay presentation to ED.		
3.1.3 The impact of resource limitations on emergency care.		
3.1.4 The principles of improvisation and harnessing all available resources.		
3.1.5 Initial emergency stabilisation and time-critical care in non-hospital settings.		
3.1.6 Telehealth and its application including: <ul style="list-style-type: none"> a. an awareness of varying communication strategies (e.g. phone, radio and internet-based strategies) b. limitations of communication strategies in certain areas c. operating procedures governing use of some radio modalities 	ST LSR SDL	WBA Exam
3.1.7 Innovation in care systems and technology and their applications to the rural/remote environment.		
3.1.8 The role of the rural ED as a link to broader health care in the region and state.		
Be able to:		
3.1.9 Demonstrate resourceful independent practice when working in geographic and professional isolation.		
3.1.10 Give and receive advice via phone, radio or telehealth medium.		
3.1.11 Initiate coordination of local medical transport agencies with appropriate specialist involvement.	ST LSR SDL	WBA Exam
3.1.12 Collaborate with doctors in a remote setting to stabilise and manage a patient while awaiting retrieval.		
3.1.13 Facilitate access to broader health care and support in the region and state.		

3.2 Emergency retrieval, transportation and patient transfer

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.2.1 Processes involved in pre-hospital response and management.		
3.2.2 The process of preparing a patient for transfer including: <ul style="list-style-type: none"> a. resuscitation and stabilization b. packaging for safe transport 		
3.2.3 Transport platforms and associated rationale.		
3.2.4 Requirements of safe patient transfer, including equipment, drugs and monitors		
3.2.5 Factors contributing to a safe referral and transfer process including: <ul style="list-style-type: none"> a. Knowing own limitations b. Knowing when, how and where to refer appropriately 	ST LSR SDL	WBA Exam
3.2.6 Effective and appropriate communication with other specialist areas (e.g. surgery, ICU).		
3.2.7 Safe and effective handover of patients: <ul style="list-style-type: none"> a. Within the emergency department b. Within the hospital c. To other hospitals/facilities 		
3.2.8 Effective utilization of limited transport logistics with multiple patients.		
Be able to:		
3.2.9 Prepare a patient transport bag.		
3.2.10 Use transport equipment safely.		
3.2.11 Choose and rationalise the best available transport method.		
3.2.12 Complete required documentation for transfer of patients (including involuntary transport of patients with acute psychosis).		
3.2.13 Conduct safe referral and effective handover with the accepting/transfer team.	ST LSR SDL	WBA Exam
3.2.14 Arrange referral to distant services in collaboration with the patient and/or carer(s), considering the balance of potential benefits, harms and costs.		
3.2.15 Repeat request and reason for referral, when necessary.		
3.2.16 Clarify and check for mutual understanding and agreed plan.		
3.2.17 Document referral conversations appropriately.		

3.3 Quality assurance, improvement and innovation

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.3.1 ACEM quality standards framework.		
3.3.2 Nationally relevant safety and quality health service and clinical governance standards and frameworks.		
3.3.3 Methods of identification and quantification of risk to patients.		
3.3.4 The application of current quality improvement methodology to monitor processes and the effects of change.		
3.3.5 Leadership strategies to motivate for innovation.	ST	RM
3.3.6 Principles of conducting morbidity and mortality meetings.	LSR	WBA
3.3.7 Principles of quality, safety and clinical standards.	SDL	Exam
3.3.8 Principles of a clinical audit, including types, use and challenges.		
3.3.9 The audit cycle.		
3.3.10 Accessing and evaluating evidence based clinical guidelines, clinical pathways and policies.		
Be able to:		
3.3.11 Critically evaluate departmental practice including through morbidity and mortality meetings.		
3.3.12 Conduct a simple clinical audit.		
3.3.13 Review, update, adapt or develop universal guidelines and clinical pathways to local conditions.	ST	WBA
3.3.14 Obtain and act on patient, carer and service user feedback and experiences.	LSR	RM
3.3.15 Listen to and incorporate different stakeholder perspectives.	SDL	Exam
3.3.16 Demonstrate reflective practice.		
3.3.17 Carry out common quality improvement processes and activities.		
3.3.18 Conduct critical incident reviews and reports.		

3.4 Decision making and patient safety

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.4.1 Complex emergency department issues including: <ul style="list-style-type: none"> a. Overcrowding in the ED b. Multiple critically ill patients c. Recruitment / rostering d. Contingency planning 	ST LSR SDL	RM WBA Exam
3.4.2 Processes for reviewing errors and adverse events.		
3.4.3 Cognitive bias and strategies to reduce cognitive bias.		
Be able to:		
3.4.4 Prioritise tasks and resources according to local guidelines.		
3.4.5 Use clinical reasoning to justify diagnostic decisions and management priorities.	ST LSR SDL	RM WBA Exam
3.4.6 Use of risk stratification methods to create a safe patient management plan.		
3.4.7 Demonstrate autonomous decision making when required.		
3.4.8 Participate in review of errors and adverse events.		

3.5 Leadership and management

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.5.1 Leadership skills and attributes relevant to the emergency department.		
3.5.2 The difference between leadership and management.		
3.5.3 The process for complaints handling in the emergency department.		
3.5.4 Various clinical and non-clinical support tools accessible in an emergency department.		
3.5.5 Principles of safe rostering.	ST	RM
3.5.6 Departmental overcrowding and access block, and the effect of these on patient care and clinical outcomes.	LSR	WBA
3.5.7 Principles of stakeholder engagement relevant to the emergency department.	SDL	Exam
3.5.8 Principles of a medico-legal report and timely submission.		
3.5.9 Principles of change management.		
Be able to:		
3.5.10 Manage the ED at times of patient surge.		
3.5.11 Manage and organise ED teams as required.		
3.5.12 Oversee the ED while managing own patient workload.		
3.5.13 Provide clinical supervision of junior staff in an ED.		
3.5.14 Liaise effectively regarding inpatient coordination.	ST	RM
3.5.15 Investigate and manage complaints as per local complaint process and deliver actions in a timely manner.	LSR	WBA
3.5.16 Competently allocate finite health resources.	SDL	Exam
3.5.17 Liaise effectively with stakeholders as relevant.		
3.5.18 Develop and use conflict resolution strategies to minimize and resolve conflict.		

3.6 Disaster management and preparedness

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.6.1 Principles of disaster management including: <ol style="list-style-type: none"> a. the comprehensive approach of prevention (mitigation), preparedness, response and recovery b. the 4 c's of command, control, coordination and communication c. the all agencies approach d. the all hazards approach e. the prepared community. 	ST LSR SDL	RM WBA Exam
3.6.2 Principles of response to chemical, biological and radiological incidents.		
3.6.3 The key implications of principles of disaster management for your hospital, your emergency department and your role in the ED.		
3.6.4 The emergency department disaster plan including: <ol style="list-style-type: none"> a. Integration of this with rest of the hospital, the local and district disaster arrangements, state and national arrangements b. Training and resources required to support the plan. 		
Be able to:		
3.6.5 Undertake disaster preparedness exercise such as desktop and simulation exercise.		
3.6.6 Apply principles of disaster triage.	ST LSR SDL	WBA Exam
3.6.7 Carry out interagency communication (e.g. police, ambulance, government and Department of Health).		

3.7 Collaboration with community and hospital

Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.7.1 The importance of intra- and inter-disciplinary relationships as they relate to the ED.	ST LSR	RM WBA
3.7.2 Principles of the relationship between the emergency department and the community it serves.	SDL	Exam
Be able to:		
3.7.3 Develop and maintain intra-disciplinary relationships through local and distant networks.		
3.7.4 Develop and maintain inter-disciplinary relationships in the ED and in the community.	ST LSR SDL	RM WBA
3.7.5 Collaborate with other emergency medicine professionals for the purposes of research, clinical governance, formal debriefing and formal peer review.		

3.8 Supervision and teaching

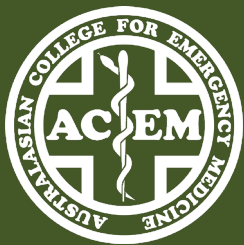
Learning Objective	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:		
3.8.1 Basic principles of adult learning.		
3.8.2 Strategies for teaching in the emergency department, which acknowledge that teaching in ED is integrated across all professional groups.		
3.8.3 Principles of bedside teaching.		
3.8.4 Strategies and educational supports for working with clinicians of various levels of experience.		
3.8.5 Strategies for supporting a doctor in difficulty.	ST	RM
3.8.6 Principles of providing effective feedback on clinical performance.	LSR	WBA
3.8.7 Delivery modes of teaching in the Emergency Department such as: a. bedside b. hand-over rounds c. formal d. didactic.	SDL WS	Exam
3.8.8 Potential for tension between educational opportunity and patient safety when supervising staff in the clinical environment.		
Be able to:		
3.8.9 Provide safe and effective supervision in the clinical environment, including recognising when to intervene to maintain patient safety.		
3.8.10 Integrate basic adult learning principles to enhance the delivery of clinical bedside teaching.		
3.8.11 Demonstrate effective bedside teaching, including teaching of skills/ procedures.	ST LSR SDL WS	RM WBA Exam
3.8.12 Proactively seize and utilise identified teaching opportunities in the emergency department environment.		
3.8.13 Deliver constructive feedback to junior medical staff and peers.		
3.8.14 Teach to a small audience or group.		

3.9 The reflective clinician

Learning Objective	Teaching and Learning Strategies	Assessment
<i>Demonstrate knowledge and understanding of:</i>		
3.9.1 Principles of critical appraisal of self.	ST	SPM
3.9.2 Strategies for professional longevity.	LSR	RM
3.9.3 The importance of continuous learning and professional development.	SDL	Exam
<i>Be able to:</i>		
3.9.4 Routinely critically appraise own total practice through self-reflection and self-assessment to demonstrate growth as a professional Emergency Medicine clinician.	ST	SPM
3.9.5 Undertake professional development and opportunities for continuous learning.	LSR SDL	RM
3.9.6 Maintain practices for independent life-long learning, including in situations of geographic remoteness and/or with limited peer support.		

3.10 Evidenced-based approach to emergency medicine practice

Learning Objective	Teaching and Learning Strategies	Assessment
<i>Demonstrate knowledge and understanding of:</i>		
3.10.1 Process of implementing knowledge into practice.	ST	WBA
3.10.2 Methods for accessing recently published information about medicine.	eLM	Exam
<i>Be able to:</i>		
3.10.3 Access relevant evidence and articles to support clinical decision-making.	ST	
3.10.4 Critically appraise clinical research and literature, including the relevance and validity of conclusions.	eLM	WBA



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