Australasian College
for Emergency Medicine

Curriculum

2022

Fellowship of the
Australasian College for Emergency Medicine

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1. Introduction

1.1 Context

The Australasian College for Emergency Medicine (ACEM) is committed to the promotion of excellence in the provision of quality emergency care to all communities across Australia and Aotearoa New Zealand. This commitment acknowledges that medical practitioners who provide emergency care require a range of clinical, academic, personal and professional attributes and expertise to deliver these services with confidence and at a consistently high standard. As such, the FACEM Curriculum seeks to describe the essential knowledge, skills and attributes expected of Emergency Medicine Physicians who are equipped to practise effectively in a culturally diverse and continuously evolving healthcare environment.

The original ACEM Curriculum Framework underwent a significant redesign as part of the Curriculum Review Project (CRP) from 2011 to 2014. This edition of the FACEM Curriculum is the result of an extensive three-year curriculum review process, commencing in 2017. Informed by the views of trainees and Fellows gleaned since the curriculum's inception, the ACEM Council of Education conducted multiple periods of formal consultation over a two-year timeframe, with internal and external stakeholders informing the review. Special Interest Groups across the emergency medicine and critical care disciplines, health jurisdictions, hospitals providing emergency medicine training, consumer advocate groups, and other specialist medical colleges were all invited to contribute to the review. Public health data, reports from government agencies, clinical practice guidelines, and emergency medicine and critical care curricula from across the world were also analysed and considered as part of the review, to ensure that the final document accurately reflects the requisite knowledge, skills and attributes expected of a specialist Emergency Medicine Physician. Furthermore, the medical education literature was reviewed to ensure that the assessment tools and modes of delivery of the curriculum and associated training program are fit for purpose, robust, contemporary and aligned to best practice in medical education. Indeed, ACEM has committed to the ongoing review and evaluation of the FACEM Curriculum to ensure the it remains a fluid and dynamic document that is responsive to the needs of Emergency Medicine Physicians, patients of emergency departments and the broader communities of Australia and Aotearoa New Zealand.

1.2 Graduate outcomes

The FACEM Curriculum is based on the CanMEDS model for specialist physician curricula that is utilised by specialist medical colleges around the world. The eight domains of the framework define the outcomes for each stage of training, including the final graduate outcomes, for all areas of practice as a specialist Emergency Medicine Physician in Australia and Aotearoa New Zealand and provide a comprehensive foundation for lifelong learning in this speciality.

Figure 1. The FACEM Curriculum Domains

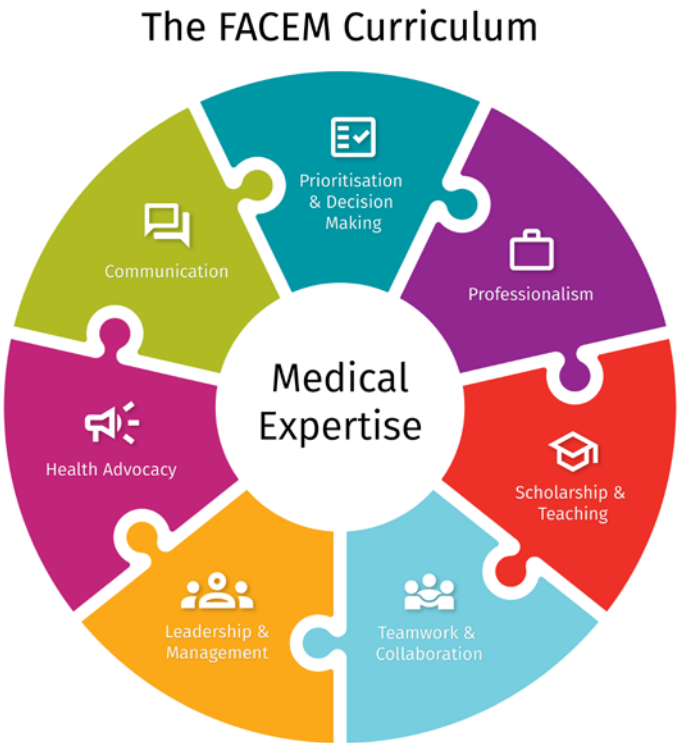


Table 1. Outcomes of the FACEM Curriculum

Domain	Training Stage 1	Training Stage 2	Training Stage 3	Graduate Outcomes
Medical Expertise	Independently assess and manage patients with single system problems and medium complexity patients not requiring resuscitation. Recognise unstable and deteriorating patients and initiate resuscitation in these.	Independently assess and manage all medium complexity patients. Resuscitate and manage critically ill or injured patients who respond to first-line therapy.	Independently assess and manage patients with high complexity presentations. Resuscitate and manage critically ill or injured patients unresponsive to first-line therapy.	Deliver safe and effective care to all presentations and through all stages of the patient's journey in the emergency department.
Prioritisation & Decision Making	Independently prioritise decisions, tasks, and referrals for a single patient, seeking assistance when prioritising for several patients. Implement strategies that influence decision making.	Independently make and prioritise timely decision regarding the care of multiple patients with single system problems. Recognise factors that impinge on safe and effective decision making. Practise situational awareness and adapt work practices accordingly.	Seek assistance, when appropriate, to make and prioritise timely decisions regarding the care of multiple patients with complex or multi-system problems. Accommodate factors that impact on performance. Practise heightened situational awareness relating to both department and patient management and respond accordingly.	Utilise strategies to prioritise tasks and optimise decision making to deliver the highest quality patient care, often with limited available information. Demonstrate continued situational awareness with increased task loading within the ED and as well as the hospital environment.
Communication	Communicate clearly and accurately with patients and colleagues in uncomplicated situations. Demonstrate accurate and concise written communication skills.	Rapidly and effectively establish rapport and trust, adapting communication skills to meet the needs of different people and circumstances. Recognise and seek further advice in difficult communication situations, including delivery of bad news.	Maintain effective professional and patient-centred communication in a complex environment. Utilise a broad communication skill repertoire to resolve difficult situations and to deliver bad news in most situations whilst recognising when to involve others.	Establish optimal rapport, and communicate effectively in complex circumstances, with speed and accuracy, with patients of all ages and cultures, families/whānau and caregivers, and colleagues of all disciplines.
Teamwork & Collaboration	Participate as an effective team member to treat all emergency patients. Co-ordinate an initial resuscitation team until a senior clinician's arrival. Collaborate with patients, families/whānau and caregivers, and other health professionals to enact patient management plans.	Undertake an increasing number of appropriately designated roles, acting as a team leader in simple clinical scenarios, and under supervision in complex clinical scenarios. Collaborate across interprofessional teams to provide effective patient care.	Confidently adapt to any team member role as directed to treat any emergency patient. Function as an effective team leader in most clinical scenarios, and collaborate with patients, families/whānau and caregivers, and other health professionals on issues beyond the immediate clinical scenario.	Effectively manage and participate in an interprofessional team, particularly at times of high stress and medical emergency.

Table 1 continued. Outcomes of the FACEM Curriculum

Domain	Training Stage 1	Training Stage 2	Training Stage 3	Graduate Outcomes
Leadership & Management	Act as a positive role model to junior staff, obtain assistance as required when managing workload, and contribute to operations of the department with support of senior staff, including participation in departmental quality improvement activities.	Effectively multitask to manage individual workload, manage a department when they are the most senior clinical on duty, recognise when to devolve responsibility to a senior clinician, and engage in the supervision of competent junior clinicians.	Comfortably manage an Emergency Department with remote senior support, clearly identify when and how to activate support systems, and supervise the clinical work of all junior clinicians. Understand the role of the Emergency Department within the hospital system.	Provide clinical supervision, management and leadership and actively foster a culture of patient safety. Participate in quality improvement activities to create a departmental administrative framework to support safe clinical practice.
Health Advocacy	Advocate for the best immediate outcome for patients in relation to accessing available health resources. Demonstrate awareness of medical, social, and cultural factors that may impact on patient encounters in the Emergency Department.	Regularly screen for factors that affect health outcomes in emergency patients, utilise local available resources and intervene to improve health outcomes. Advocate for a patient's best interests from presentation to discharge.	Systematically screen and intervene to protect and advance health and well-being of all patients within the Emergency Department, integrating the factors which affect patients beyond the Emergency Department, and proactively engage in health promotion.	Protect and advance the health and wellbeing of any individual patients, communities and populations.
Scholarship & Teaching	Take responsibility for self-directed learning, informed by reflective practice and role model influences. Participate in departmental teaching to further knowledge and skills. Retrieve clinical references to guide self-education and patient care. Actively teach junior staff skills expected of a novice clinician. Participate as the facilitator/ instructor in departmental educational activities. Demonstrate the ability to source and apply evidence.	Proactively identify own learning needs and respond appropriately. Apply established evidence-based practice to patient care and appreciate own responsibility to contribute to clinical research. Teach colleagues and patients in clinical and other environments. Provide effective role modelling to junior staff.	Undertake learning focused on attaining mastery at the level of a FACEM graduate. Use evidence-based practice as the foundation for clinical care and systematically evaluate its relevance. Create and address meaningful research questions, routinely seize the teachable moment, and demonstrate understanding that providing education is integral to emergency medicine practice.	Make sound judgements regarding the creation, translation, application and dissemination of medical knowledge. Commit to independent advancement and maintenance of own professional skills and knowledge, as well as contributing to the teaching of others.
Professionalism	Maintain high standards in behaviour and ethical practice. Appreciate mechanisms to protect self from detrimental effects of work-related stress and comply with professional responsibilities and obligations.	Engage in increasingly independent reflective practice, focusing on self-improvement in professional ethics and behaviour. Utilise strategies to enable continued professional behaviour in challenging circumstances.	Independently reflect on professional ethics and behaviour for ongoing self-development. Routinely adapt professional behaviour in times of clinical complexity and in the challenging Emergency Department environment. Utilise strategies to maintain a healthy work-life balance.	Practice ethically and adhere to medicolegal requirements, adopt and role model sound wellbeing practices, and actively commit to and promote the maintenance of professional standards.

1.3 Entrustable areas of practice

Integration of the graduate outcomes detailed in the domains of the FACEM Curriculum, assessed programmatically throughout the FACEM Training Program, culminates in three entrustable areas of practice in emergency medicine:

1. **High quality patient care** – The FACEM provides optimal care for any single patient through the application of knowledge and skills across the domains of Medical Expertise, Prioritisation and Decision Making, Health Advocacy, Communication, and Professionalism. This entrustable area of practice is assessed throughout the FACEM Training Program in Workplace-based Assessments, In-Training Assessments, the Paediatric Emergency Requirement and Examinations
2. **Professional workplace performance** – The FACEM performs at their best in the dynamic and demanding environment that is the emergency department by integrating knowledge and skills in the domains of Communication, Teamwork and Collaboration, Leadership and Management, and Professionalism. This area of entrustable practice is assessed during training in Shift Reports and In-Training Assessments.
3. **Commitment to career longevity** – The FACEM possesses skills and values that sustains them throughout their career utilising skills in the domains of Scholarship and Teaching, and Professionalism. This entrustable area of practice is assessed during the FACEM Training Program in In-Training Assessments and the Research Requirement.

Figure 2. FACEM Training Program Entrustable Areas of Practice

2. The FACEM Training Program

2.1 The Training Program structure

Table 2. FACEM Training Program Structure for trainees commencing training after 1 February 2022

<table>
<tr><th></th><th>Training Stage 1 (TS1)</th><th>Training Stage 2 (TS2)</th><th>Training Stage 3 (TS3)</th><th>Training Stage 4 (TS4)</th></tr>
<tr><td rowspan="4">Placement requirements</td><td>12 Months FTE
(Adult or Mixed) ED</td><td>12 Months FTE in ED</td><td>12 Months FTE in ED</td><td>6 Months FTE in ED*
and
6 Months FTE Elective (ED or Non-ED) *#</td></tr>
<tr><td colspan="4">Including min 6 months FTE in a Major Referral ED
and 12 months FTE in a Non-Major Referral ED</td></tr>
<tr><td colspan="3">and 6 Months FTE in Non-ED at any time during TS1-TS3#</td><td></td></tr>
<tr><td></td><td colspan="3">and 6 Months FTE in Critical Care (adult or mixed ICU and/or Anaesthetics) at any time during TS2-TS4#</td></tr>
<tr><td>Maximum time per stage</td><td>3 years</td><td colspan="2">8 years</td><td>Limited to time remaining of 12 year overall time limit</td></tr>
<tr><td>Maximum total</td><td colspan="4">12 years</td></tr>
<tr><td rowspan="2">Programmatic assessment requirements</td><td colspan="4">ITAs
(every 3 calendar months)</td></tr>
<tr><td>EM-WBAs (in TS1 ED)
• 8 x Mini-CEX (must include one of each Neurological, Respiratory, Cardiovascular and Abdominal)
• 1 x Comm Skills (Handover)
• 1 x Comm Skills (Referral)</td><td>EM-WBAs (in TS2 ED)
• 4 x CbD (must include 2 x medium complexity)
• 4 x Mini-CEX (must include 2 x medium complexity)
• 1 x Comm Skills (Handover)
• 1 x Comm Skills (Referral)</td><td>EM-WBAs (in TS3 ED)
• 4 x CbD (must include 3 x high complexity)
• 3 x Mini-CEX (including 2 x high complexity)
• 3 x Shift Reports</td><td>EM-WBAs (in TS4 ED)
In ED:
• 3 x Shift In-charge Report
• 2 x Team Lead Resuscitation</td></tr>
<tr><td colspan="5">*All ED and Elective placements in TS4 must have received TS4 accreditation, including Non-ED
#To be taken in minimum 2 x 3-month FTE terms or 1 x 6-month FTE term</td></tr>
</table>

<table>
<tr><th></th><th>Training Stage 1 (TS1)</th><th>Training Stage 2 (TS2)</th><th>Training Stage 3 (TS3)</th><th>Training Stage 4 (TS4)</th></tr>
<tr><td rowspan="3">Training requirements</td><td></td><td></td><td colspan="2">M&M presentation
Formal Teaching Presentation
Guideline/Protocol Review or Clinical Audit</td></tr>
<tr><td colspan="4">Procedural Requirement (Core DOPS)</td></tr>
<tr><td colspan="4">To be completed to be eligible for the Fellowship Clinical Examination:
Paediatric Emergency Requirement (PER) (additional 6 x PER-WBAs, 2 x PER-DOPS, Portfolio - a maximum of 2 PER DOPS and 1 PER Mini-CEX may be completed in Training Stage 1)
Research Requirement</td></tr>
<tr><td>Examinations</td><td>Primary Written and Primary Viva</td><td></td><td>Fellowship Written</td><td>Fellowship Clinical</td></tr>
<tr><td>Online module requirements</td><td>To be completed to be eligible for the Primary Viva Examination:
• ACEM Core Values
• Indigenous Health & Cultural Competence
• Assessing Cultural Competence</td><td colspan="2">To be completed to be eligible for the Fellowship Written Examination:
• Critical Care Airway Management
• Clinical Supervision
• Giving Feedback
• Ultrasound

To be completed to be eligible for the Fellowship Clinical Examination:
• Clinical Leadership</td><td></td></tr>
</table>

2.2 Training outside the emergency department

Placements undertaken outside ACEM-accredited Emergency Departments are valuable components of the FACEM Training Program for both trainees and for the development of the emergency medicine speciality itself. Emergency medicine is the nexus through which other specialities interact regarding emergent and acute presentations. Periods of focused immersive training undertaken outside the emergency department enhance the development of knowledge and skills fundamental to the practice within it. Effective collaboration between Emergency Medicine Physicians and specialists of other medical disciplines is crucial to the provision of patient-centred care and the optimisation of processes and systems within hospitals.

Critical Care placements

Critical care placements may be undertaken in accredited Anaesthetics and/or Intensive Care Units accredited by ANZCA, CICM or ACEM. Under the supervision of Critical Care consultants, trainees are able to refine skills developed in the emergency department, including, but not limited to:

- Effective use of airway adjuncts and bag-valve-mask ventilation;
- Effective use of a range of invasive airway equipment for intubation;
- Initiation and management of invasive haemodynamic monitoring in an anaesthetised patient;
- Development of acute and ongoing pain management plans;
- Performance of procedural sedation, and local and regional anaesthesia;
- Insertion and management of arterial and venous cannulation.

Non-ED placements

Training that contributes to the Non-ED requirement may be undertaken in sites accredited by other specialist medical Colleges, in Special Skills Placements (SSPs) and other contexts accredited by ACEM for the purposes of FACEM training.

Placements with in-patient teams provide trainees with the opportunity to develop an appreciation of the patient's journey after the emergency department encounter and the clinical knowledge and skills required to manage patients in these contexts.

Learning experiences in ACEM-accredited SSPs vary and are based on learning outcomes detailed in the individual SSP Accreditation Guidelines available on the ACEM website. These range from skills developed in teaching and learning during a Medical Education placement, to the clinical and technical skills acquired during a Pre-hospital and Retrieval Medicine placement. Additional opportunities for structured training also exist in Global Emergency Care, which is considered and accredited on a case-by-case basis. Some SSPs provide a focus on senior clinical leadership and management expertise, and so are accredited for trainees to undertake in the final stage of FACEM training. Irrespective of the context in which they take place, ACEM-accredited non-ED training experiences are directly related to and further enhance the knowledge and skills acquired and applied in the emergency department. The focus on approving any placement (including overseas placements) has always been on appropriate training for future fellows for Australasian locations.

Table 3. Non-ED training placements for trainees commencing training after 1 February 2022

Specialty	Sites accredited by	Certified as	
Critical Care	ANZCA CICM	Anaesthetics Intensive Care Medicine	
Urgent Care	RNZCUC	Urgent Care	
General Practice	RACGP ACRRM	General Practice	
General Medicine	RACP	Cardiology Clinical Pharmacology Gastroenterology Infectious Disease Neonatology/Perinatology	Paediatrics Neurology Public Health Medicine others
Medical Administration	RACMA	Medical Administration	
Pain Medicine	ANZCA - Faculty of Pain Medicine	Pain Medicine	
Sports & Exercise Medicine	ACSEP	Sports & Exercise Medicine	
Surgery	RACS	General Surgery (adult or paed.) Orthopaedic Surgery Neurosurgery Otolaryngology Head and Neck Surgery	Plastic and Reconstructive Surgery Cardiothoracic Surgery Urology Vascular Surgery
Ophthalmology	RANZCO	Ophthalmology	
Obstetrics & Gynaecology	RANZCOG	Obstetrics & Gynaecology	
Pathology	RCPA	Pathology	
Psychiatry	RANZCP	Psychiatry	
Radiology	RANZCR	General Radiology	
Special Skills Placement	ACEM	Clinical Informatics Drug & Alcohol Addiction Management Emergency Medicine Research Forensic Medicine Geriatric Emergency Medicine Hospital in the Home Hyperbaric Medicine Indigenous Health Medical Administration/Safety & Quality	Medical Education/Simulation Ophthalmology & ENT Emergency Medicine Pre-Hospital and Retrieval Medicine Rural/Remote Health Toxicology/Addiction Medicine Trauma Ultrasound Women's Emergency Care

2.3 Teaching and learning strategies

The ACEM Council of Education is cognisant of the variety of trainees who may undertake the FACEM Training Program and the range of expertise they will bring to their training experience. As with all medical practitioner training programs, undergraduate and postgraduate, adult learning principles apply. Trainees, supported by those responsible for training in accredited training sites, ascertain their learning needs to effectively plan and direct their experiences that will support their growth and development as Emergency Medicine Physicians, during the FACEM Training Program, and throughout their lifelong learning experience.

The FACEM Curriculum and associated Training Program facilitate the spiral and experiential nature of specialist medical education. Learning outcomes in each domain are articulated for each stage of training, demonstrating that topics and themes are regularly revisited with each patient presentation, as trainees move from site to site throughout the program and as they progress from one Training Stage to the next. Each encounter brings new knowledge and skills to be developed, more advanced application of such expertise, and an increase in proficiency through appropriately supported structured education programs, self-directed learning and supervised practical training experiences. Independent and supported reflective practice, along with contemporaneous, constructive and specific feedback on performance from colleagues and supervisors, enables trainees to customise their training experience to meet their specific learning requirements and prepare appropriately for formal assessments.

The FACEM Curriculum and associated Training Program rely on multimodal methods of teaching. The following teaching and learning strategies specific to the FACEM Curriculum and Training Program include a range of delivery modes and sources of reference so as to cater to the variety of learning styles and levels of expertise of all FACEM trainees.

Education Support Resources

The ACEM Education Resources website provides trainees with readily accessible learning support resources, including bespoke self-contained e-learning modules (eLM). These resources are mapped directly to the learning outcomes articulated in the curriculum and can be accessed at the trainee's own pace according to their individual needs. The resources are designed to support trainees, educators, supervisors and Directors of Emergency Medicine Training and serve as a useful point of reference for appraisal and assessment.

Structured Education Program (SEP)

Structured Education Programs are delivered in accredited training sites by Emergency Medicine Physicians, other specialist consultants, senior FACEM trainees and where appropriate, other facilitators. The programs reflect adult learning principles, consider different learning styles of trainees and are designed to align with the learning outcomes detailed in the FACEM Curriculum and the needs of the trainees.

Programs must also include simulation-based education, particularly for clinical encounters that are uncommon or are of high risk and require structured and specific teaching of vital skills in order to mitigate against underlying causes of adverse events. Simulation-based training provides invaluable opportunities for development and assessment of knowledge, technical and non-technical skills and critical prioritisation, decision-making, teamwork and collaboration skills.

The SEP timetable should be distributed in a timely manner and include opportunities for trainees to deliver education and/or facilitate preparation for assessments and examinations, as appropriate.

Supervised Training (ST)

The FACEM Training Program follows an apprenticeship model of learning, whereby trainees develop the requisite knowledge and skills during everyday work in an accredited training site under the supervision of suitably skilled consultants and other personnel. Training sites utilise models of care and rostering practices to ensure trainees are supervised in the workplace appropriate to their level of training and the site's patient case-mix. Given the nature of emergency medicine practice, training sites must ensure that there is a rostered consultant for trainees to access when direct clinical supervision is not possible.

Self-directed Learning (SDL)

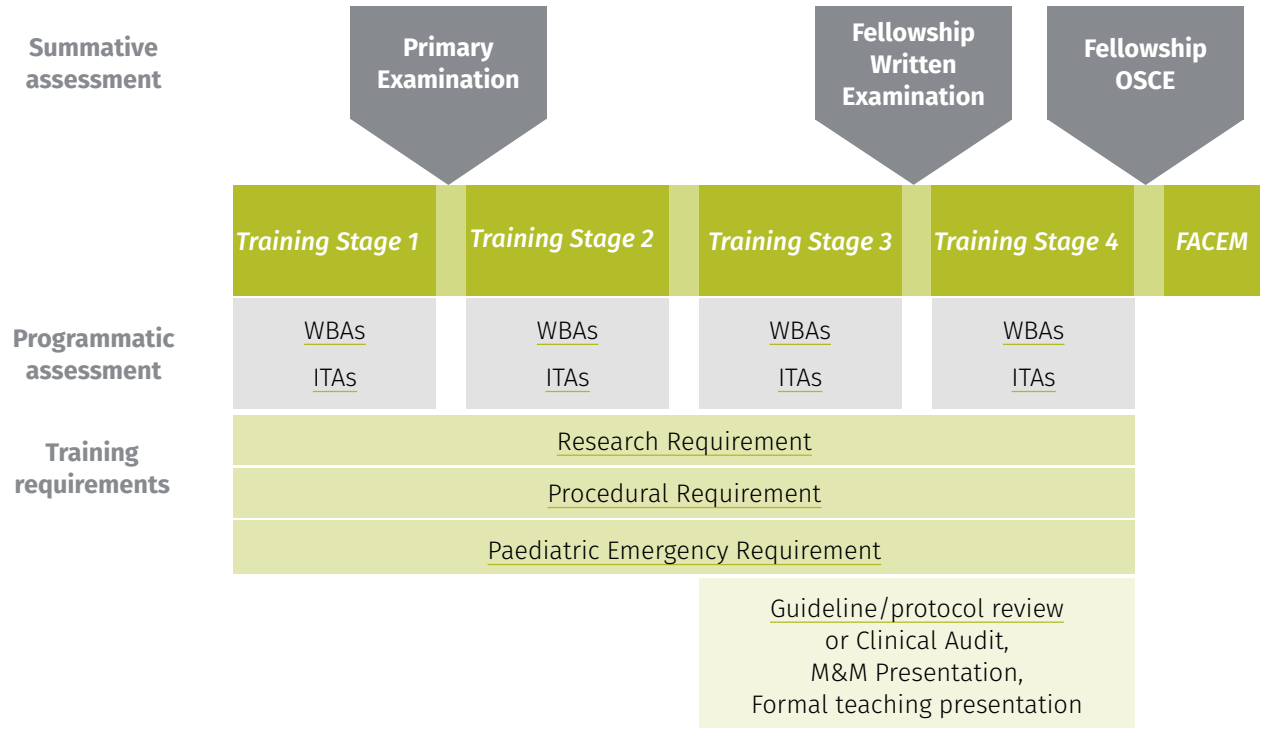
In line with adult learning principles, the FACEM Training Program requires trainees to undertake self-directed learning to ensure their individual learning and development needs are met. Trainees take responsibility for their own learning by determining their needs, setting goals, identifying resources,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

3. Assessment of knowledge, skills and attributes

The learning outcomes described in the FACEM Curriculum detail the knowledge, skills and attributes required of a competent and effective Emergency Medicine Physician practising in Australia and Aotearoa New Zealand.

A curriculum must comprise an assessment regimen designed to assess achievement of the stipulated learning outcomes. The FACEM Curriculum takes a combined approach to assessment, utilising both programmatic and traditional assessment methodologies. A suite of assessment tools, including Workplace-based Assessments (WBAs) and In-Training Assessments (ITAs), is utilised throughout training, the results of which are combined and analysed by Trainee Progression Review Panels who make summative decisions on trainee progress from one Training Stage to the next. When required, learning development plans are created and implemented, scaffolded by a focus on regular and contemporaneous feedback on performance and competence development. Written and Clinical Examinations, and assessments of satisfactory completion of specific training requirements, contribute further to decisions on trainee progression and final assessment of competence.

Figure 3. Assessment program for the FACEM Curriculum.



3.1 Assessment

The following assessment methodologies are implemented in the FACEM Curriculum.

Workplace-based Assessments (WBA)

The clinical encounters that trainees face every day provide rich learning experiences that are assessable. The purpose of Workplace-based Assessments (WBAs) is to assess trainees, whenever possible, at the time of doing, 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 the standards described for each criterion.

The suite of WBAs for the FACEM Training Program include:

Mini-Clinical Evaluation Exercise (mini-CEX) involves a trainee being directly observed by an Assessor whilst performing a focused clinical task during a specific patient encounter, including history taking, physical examination, clinical synthesis or patient consultation. Encounters focused primarily on technical performance or procedural skills, including those focused on preparation for a procedure, must NOT be completed as a mini-CEX. These should be completed as DOPS.

Case-based Discussion (CbD) is conducted between the trainee and the Assessor after the clinical encounter has taken place. The Assessor rates and provides feedback on the trainee's clinical reasoning in the case, based on the patient's case notes and discussion of the case with the trainee.

Communication Skills required for competent clinical handover and patient referral are assessed during these tasks. For a clinical handover, the Assessor rates and provides feedback on the trainee's capacity to convey salient clinical information, specify incomplete assessment and management tasks, and provide appropriate documentation in order to minimise the risk associated with handover. For referrals, assessment is based on the trainee's ability to accurately convey clinical findings, provisional diagnosis, management plan and reason for the referral.

Shift Reports and Shift In-Charge Reports are based on the trainee's performance throughout a normal shift and when the trainee is in charge, respectively. Trainees are assessed in all domains of the curriculum, with a particular emphasis on Leadership and Management for shifts in which the trainee is in charge. Feedback may be provided during the shift, as required, or at the completion of the shift.

Team Lead Resuscitation assessments involve the direct observation of a trainee leading a team during the resuscitation of a patient. The ability to lead a team during a resuscitation is essential for all FACEMs and this assessment provides the opportunity for trainees to consolidate their leadership skills.

Morbidity and Mortality Meeting Presentations require trainees to prepare and present at a morbidity and mortality (M&M) meeting, including providing a case summary, error analysis, and proposed future actions, supported by contemporary best-practice literature.

Teaching Presentations require trainees to prepare and deliver a teaching presentation as part of the structured education program at their training site. These may be case presentations with focussed literature reviews, or the teaching of a procedural skill in simulation.

Guideline/Protocol Review or Clinical Audit requires trainees to select a clinical guideline or protocol from their training site, undertake a review in light of current best-practice literature, and propose potential amendments, if appropriate, to improve patient care. Similarly, clinical audit involves selecting and measuring a clinical outcome or process against well-defined standards of evidence-based medicine in order to identify changes required to maximise quality of care.

In-Training Assessments (ITA)

In-Training Assessments (ITA) ITAs are conducted every three (3) calendar months throughout training by the Director of Emergency Medicine Training (DEMT) or Supervisor. ITAs track the trainee's progress against the learning outcomes for a given Training Stage in each domain of the FACEM Curriculum. At the start of a Training Stage, trainees will likely 'require significant/ further development to demonstrate TSx learning outcomes'. Throughout the training stage, trainees should demonstrate a steady rate of improvement through the ITAs, and are expected to be rated at 'usually/ consistently demonstrates/ consistently above TSx learning outcomes' for each domain by the completion of that Training Stage. The ITA tool enables trainees to reflect on their own progress and facilitates the provision of constructive feedback on progress and performance by the DEMT or Supervisor, discussion of which informs the development of learning intentions for the following ITA period.

Research Requirement (RR)

The Research Requirement, aligned to the Scholarship and Teaching domain of the FACEM Curriculum, requires trainees to develop their skills in applying best evidence and academic knowledge to their practice in emergency medicine. The Research Requirement may be undertaken by either coursework (University studies) or original research (paper, project or thesis).

Procedural Requirement (PR)

The Procedural Requirement comprises core procedures that are assessed using the Direct Observation of Procedural Skills (DOPS) WBA tool. These DOPS procedures, considered integral to the practice of emergency medicine, involve a trainee being observed by an Assessor whilst performing a specific clinical procedure. The Assessor rates and provides feedback on the trainee's performance, from the technical part of performing the procedure to post-procedure management and discharge advice, as applicable. The Procedural Requirement will be noted by the relevant Trainee Progression Review Panel once all core DOPS have been completed successfully and submitted in the online Trainee Portal.

Paediatric Emergency Requirement (PER)

The Paediatric Emergency Requirement requires trainees to integrate knowledge and skills across all domains to the Paediatric Presentations section of the curriculum. The components of the Paediatric Emergency Requirement are designed to facilitate learning and assessment, and to optimise exposure to an appropriate breadth and acuity of paediatric emergency presentations.

Trainees will be advised to plan their training to ensure that they will have adequate access to paediatric emergency cases. The components of the Paediatric Emergency Requirement must be completed in:

(i) Paediatric EDs accredited for Specialist Paediatric Emergency Medicine training, and/or

(ii) mixed EDs accredited by ACEM for the Paediatric Emergency Requirement (current 'paediatric logbook accredited' sites, with a minimum of 5000 paediatric presentations annually).

The Paediatric Emergency Requirement comprises eight (8) WBAs (in addition to the WBAs required for each Training Stage in table 2) and the completion of a Paediatric Emergency Portfolio (PEP). The PER may be started in Training Stage 1 and can be completed at any time from Training Stage 2. It must be completed to be eligible for the Fellowship Clinical Examination.

Paediatric Workplace-Based Assessments (WBAs)

Trainees must have completed the below specified paediatric WBAs **to be eligible for the Fellowship Clinical Examination**. In Training Stage One, trainees may complete one PER Mini-CEX and two PER DOPS. The remainder must be completed in later Training Stages.

3 x Mini-Clinical Examination (mini-CEX)

- Paediatric patient discharge communication for common diagnosis, e.g., asthma, bronchiolitis, gastroenteritis (minimum of low complexity);
- Focussed assessment of a paediatric patient aged two (2) to twelve (12) years (verbal - communication with child) with unclear diagnosis, e.g., shortness of breath, or abdominal pain (minimum of medium complexity); and
- Focussed assessment of a paediatric patient aged less than two (2) years (non-verbal – communication with carer), with unclear diagnosis, e.g., shortness of breath, or abdominal pain (minimum of medium complexity).

3 x Case-based Discussions (CbD)

Including at least one each of:

- two (2) to twelve (12) years of age; and
- less than two (2) years of age.

Of the three (3) CbDs, at least one must be a case of medium complexity, and at least one case must be of high complexity.

2 x Direct Observation of Procedural Skills (DOPS)

- Specimen collection for lab analysis, for a paediatric patient of five (5) years or less of age for any of the following: peripheral intravenous cannula insertion, suprapubic catheter aspiration, in-dwelling urinary catheter aspiration, lumbar puncture; and
- Procedural sedation, for paediatric patient of five (5) years or less of age.

Paediatric Emergency Portfolio (PEP)

The portfolio is designed with variable training situations in mind (e.g., mixed vs Paediatric EDs). Rather than a formal piece of assessment on which progression decisions are made, the PEP provides a mechanism for recording training experiences, enabling:

- Trainees to monitor, reflect on, and direct their own learning and training appropriately;
- DEMTs to monitor and comment on the trainee's experience and performance in each ITA, ensuring it is appropriate for the relevant Training Stage;
- Facilitated discussion as part of the ITA feedback discussion; and
- ACEM to monitor the trainee's experience and the exposure to paediatric cases provided by training sites.

The PEP can be transferred between sites. It ensures a minimum, consistent experience for all, regardless of the ED type and setting. Trainees will be required to record a minimum of 400 cases, with the following minimum numbers applying:

- 200 related to the management of children less than five (5) years of age;
- 200 to the management of children of ages five (5) to fifteen (15) years;
- 50 cases classified as triage category 1 or 2 of which at least 25 must be children less than 5 years of age; and
- 150 cases classified as triage category 1, 2 or 3.

For paediatric cases to be included in the portfolio, trainees must have provided substantive care to the patient from the outset, including taking a history, performing a physical examination and participation in management and disposition decisions. This must be documented in the patient's clinical record by the trainee.

When all paediatric WBAs have been completed, and the minimum number of cases have been logged in the portfolio, this will trigger a review of the trainee's Paediatric Emergency Requirement at the next relevant Trainee Progression Review Panel meeting.

Examinations

Primary Examinations

The objective of the Primary Examinations, both Written and Oral, is to ensure that trainees possess the required level of knowledge and understanding of the four basic medical sciences – Anatomy, Pathology, Physiology and Pharmacology – as they form the foundation for the practice of emergency medicine.

Primary Written Examination – PEx(W) - is conducted online and consists of two 3-hour Multiple-Choice Question (MCQ) papers.

Primary Oral Examination - PEx(VIVA) - is conducted at a testing centre and consists of four 10-minute stations.

The Foundations of Emergency Medicine section of the FACEM Curriculum provides guidance on the degree to which each learning outcome is assessed in the Primary Examinations. These Levels of Assessment are:

- *Level of Assessment 1 (LoA1):*

  Assessed in depth in the PEx(W) and the PEx(VIVA), addressing knowledge, comprehension, application and/or analysis. Clinical integration of basic science concepts may be examined to the extent covered by the relevant prescribed texts. Topics at this level will be examined more frequently than topics assigned LoA 2 or 3.

- *Level of Assessment 2 (LoA2):*

  Assessment in some detail in both PEx(W) and the PEx(VIVA), addressing knowledge, comprehension and/or application. Clinical integration of basic science concepts may be examined to the extent covered by the relevant prescribed examination texts. Topics at this level will be examined more frequently than LoA3 but less frequently than LoA1.

- *Level of Assessment 3 (LoA3):*

  Assessed less frequently than LoA1 and LoA2 learning outcomes, addressing knowledge and comprehension only of overarching concepts and general principles involved in the topic without need for fine detail.

Fellowship Examinations

The Fellowship Examinations, Written and Clinical, form a major part of the assessment in the latter stages of the FACEM Training Program. These examinations test knowledge and skills at the level expected of a junior Emergency Medicine Consultant. Whilst the examinations are stand-alone assessments, trainees must pass the Fellowship Written Examination to be eligible to sit the Clinical Examination.

Fellowship Written Examination – FEx - is conducted online and consists of two 3-hour papers. The first is comprised of a Short Answer Question (SAQ) paper, the second is a Multiple-Choice Question (MCQ) paper. The examination is conducted at a number of testing centres around Australia and Aotearoa New Zealand.

Fellowship Clinical Examination - FEx – is an Objective Structure Clinical Examination (OSCE) conducted over two consecutive days. It consists of twelve 11-minute clinical stations based on a variety of scenarios that trainees would expect to see as part of their daily work in the emergency department, including history taking, physical examinations, communication, procedural skills, simulations, resuscitation, teaching, managing the ED, teamwork, case synthesis, creating management plans and interpreting investigation results.

3.2 Teaching and learning strategies and assessments key

Each of the learning outcomes of the FACEM Curriculum described in the tables throughout this document are associated with teaching and learning strategies, and assessments. These have been abbreviated and the expanded version can be found in the key below.

Table 4. Curriculum teaching and learning strategies and assessments key:

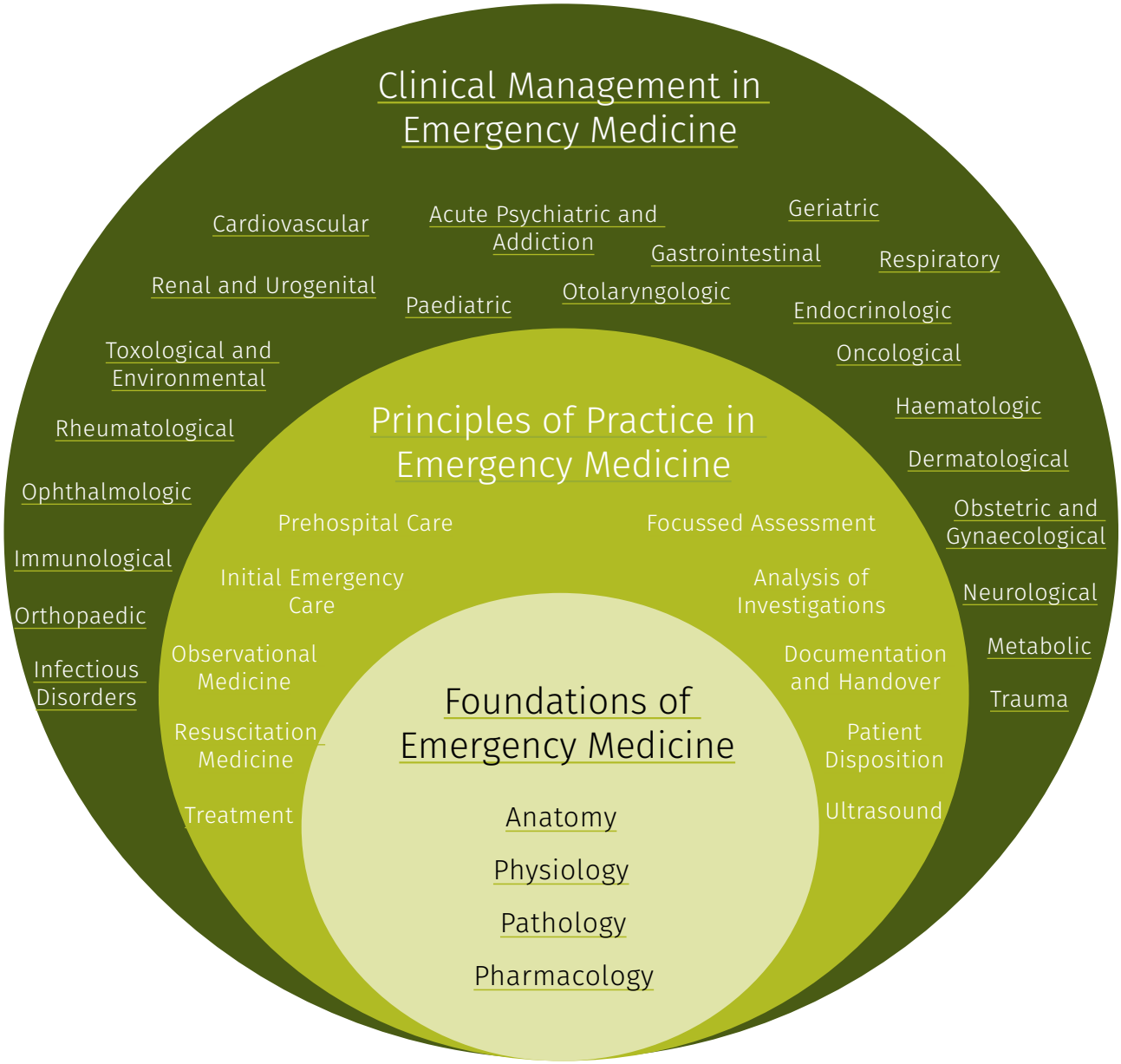
	Abbreviation	Meaning
Assessments	**WBA**	Workplace-based Assessment
	ITA	In-Training Assessment
	RR	Research Requirement
	PR	Procedural Requirement
	PER	Paediatric Emergency Requirement
	PEx(W)	Primary Examination (Written)
	PEx(VIVA)	Primary Examination (VIVA)
	FEx	Fellowship Examination (Written and Objective Structured Clinical Examination)
Teaching and learning strategies	**ST**	Supervised Training
	SDL	Self-directed Learning
	SEP	Structured Education Program
	eLM	e-Learning Module
	WS	Workshop

4. Knowledge, skills and attributes for Emergency Medicine

Medical Expertise

Medical Expertise is the basis of practice as an Emergency Medicine Physician. The FACEM Curriculum describes the required medical expertise as a scaffold (Figure 4), beginning with the basic medical sciences detailed in the Foundations of Emergency Medicine, upon which the Principles of Practice in Emergency Medicine across the patient journey through the emergency department are based, that are applied to the Clinical Management of patients of all ages presenting to the emergency department, including those critically ill, injured and undifferentiated.

Figure 4. Scaffold of Medical Expertise for Emergency Medicine Physicians.



1. Foundations of Emergency Medicine

1.1 Anatomy

By the end of Training Stage 1, trainees must demonstrate knowledge and understanding of anatomy as pertains to emergency medicine.

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Anatomical terminology, including – Anatomical position – Anatomical planes – Terms of relationship and comparison – Terms of laterality – Terms of movement	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Common anatomical variations	3	SEP, SDL	PEx(W) PEx(VIVA) FEx
+ Anatomy of: – Integumentary system – Skeletal system, including cartilage, bones, bone markings and formations, joints – Muscular system, including muscle types – skeletal, cardiac striated, smooth – Fascial compartments, bursae, potential spaces, cartilage, bone markings, joints – Cardiovascular system, including vascular circuits and vessels – Lymphoid system – Nervous system, including central, peripheral, somatic, and autonomic systems	 3 1 2 1 2 2 1	SEP, SDL	PEx(W) PEx(VIVA) FEx
+ Anatomy of the thorax, including: – Overview of the thorax – Skeleton of the thoracic wall – Thoracic apertures – Fascia and joints of the thoracic wall – Movements of thoracic wall – Muscles, innervation and vascularisation of the thoracic wall – Breasts – Surface anatomy of the thoracic wall – Pleurae, lungs and tracheobronchial tree – Overview of mediastinum – Pericardium – Heart – Superior mediastinum and great vessels – Posterior mediastinum – Anterior mediastinum – Surface anatomy of the heart and mediastinal viscera	 3 1 3 3 3 2 2 1 1 1 2 1 1 2 3 1	SEP, SDL	PEx(W) PEx (VIVA) FEx

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Anatomy of the anterolateral abdominal wall, including:			
– Overview, including walls, cavities, regions and planes	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Fascia and anterolateral abdominal wall	3		
– Muscles and neurovasculature of the anterolateral abdominal wall	2		
– Internal surface of the anterolateral abdominal wall	3		
– Inguinal region	1		
– Spermatic cord, scrotum and testis	1		
– Surface anatomy of the anterolateral abdominal wall	1		
+ Anatomy of the peritoneum and subdivision of the peritoneal cavity.	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Anatomy of abdominal viscera, including:			
– Overview of abdominal viscera and digestive tract	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Oesophagus, stomach, small and large intestines, spleen, pancreas, liver, biliary ducts and gallbladder, kidneys, ureters and suprarenal glands	2		
– Summary of innervation of abdominal viscera	2		
+ Anatomy of the diaphragm, including:			
– Vessels and nerves	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Diaphragmatic apertures	3		
– Actions of the diaphragm	3		
+ Anatomy of the posterior abdominal wall, including:			
– Fascia and muscles of the posterior abdominal wall	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Nerves and vessels of the posterior abdominal wall	2		
+ Anatomy of the pelvis and perineum, including:			
– Overview	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Bones and features of the pelvic girdle	1		
– Orientation of the pelvic girdle and its joints and ligaments	2		
– Walls and floor of the pelvic cavity	2		
– Peritoneum and peritoneal cavity of the pelvis	2		
– Pelvic fascia	3		
– Nerves, arteries and veins of the pelvis	2		
– Lymph nodes of the pelvis	3		
– Urinary organs and rectum	2		
– Female internal genital organs	2		
– Male internal genital organs	2		
– Lymphatic drainage of pelvic viscera	3		
– Fascia and pouches of urogenital triangle, male and female urogenital triangles, and features of the anal triangle	3		

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Anatomy of the back and vertebral column, including:			
– Overview	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Structure, function and regional characteristics of vertebrae	1		
– Joints, movements, curvature and vasculature of the vertebral column	2		
– Nerves of the vertebral column	1		
– Extrinsic and intrinsic back muscles	3		
– Surface anatomy of the back muscles	3		
– Suboccipital and deep neck muscles	3		
– Contents of the vertebral canal, including spinal cord, spinal nerve roots, spinal meninges and cerebrospinal fluid (CSF),	1		
– Vasculature of spinal cord and spinal nerve roots	2		
+ Anatomy of the lower limb, including:			
– Overview of the lower limb	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Development of the lower limb	1		
– Bones and joints of the lower limb, including surface anatomy	1		
– Subcutaneous tissue and fascia, venous drainage, cutaneous and motor innervation	1		
– Lymphatic drainage of the lower limb	2		
– Posture and gait, including standing at ease and the gait cycle	2		
– Anterior and medial regions of thigh, including organisation, musculature, neurovasculature and surface anatomy	1		
– Gluteal and posterior regions of thigh, including the buttocks and hip, muscles and neurovasculature	2		
– Surface anatomy of the gluteal and posterior regions of the thigh	1		
– Popliteal fossa, including popliteal boundaries and contents	1		
– Contents of the anterior, lateral and posterior compartments and surface anatomy of leg	1		
– Skin, fascia, neurovasculature and surface anatomy of the ankle and foot	1		
– Muscles of the foot	2		

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Anatomy of the upper limb, including:			
– Overview	1		
– Development of the upper limb	1		
– Bones of the upper limb, including surface anatomy	1		
– Fascia, venous drainage, cutaneous and motor innervation	1		
– Lymphatic drainage of the upper limb	2		
– Surface anatomy and muscles of the pectoral, deltoid and scapular regions of the upper limb	1		
– Axilla, including boundaries, vasculature, lymph nodes and brachial plexus	1		
– Musculature, neurovasculature and surface anatomy of the arm	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Cubital fossa, including surface anatomy, boundaries and contents	1		
– Compartments of the forearm, including musculature, neurovasculature and surface anatomy	1		
– Hand, including fascia and compartments of the palm, musculature, tendon and tendon sheaths, neurovasculature and surface anatomy	1		
– Sternoclavicular, acromioclavicular, and intercarpal joints	2		
– Glenohumeral, elbow, proximal and distal radio-ulnar joints, wrist, carpometacarpal, intermetacarpal, metacarpophalangeal and interphalangeal joints	1		
+ Anatomy of the head, including:			
– Overview	2		
– Facial, lateral, occipital, and superior aspects of the cranium	2		
– Internal and external surfaces of the cranial base	2		
– Walls of the cranial cavity	2		
– Regions of the head	2		
– Features, surface anatomy and nerves of the face and scalp	1		
– Muscles and superficial vasculature of the face and scalp	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Cranial meninges	3		
– Meningeal spaces	2		
– Parts of the brain, including the ventricular system and arterial blood supply	1		
– Venous drainage of the brain	2		
– Orbits, extraocular muscles, and nerves of the orbit	1		
– Eyelids, eyeballs, lacrimal apparatus and vasculature of the orbit	2		
– Surface anatomy of the eye and lacrimal apparatus	1		
– Parotid region	2		

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ *Anatomy of the head continued*			
– Temporal region, infratemporal fossa and temporomandibular joint	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Oral region, including oral cavity, lips, cheeks, gingivae, teeth, tongue and salivary glands	2		
– Palate	3		
– Pterygopalantine fossa and pterygopalantine part of maxillary artery	3		
– Maxillary nerve	2		
– External nose, nasal cavities and neurovasculature of the nose	2		
– Paranasal sinuses	3		
– External and middle ear	2		
– Internal ear	3		
+ Anatomy of the neck, including	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Overview	3		
– Cervical vertebrae	1		
– Hyoid bone	3		
– Cervical subcutaneous tissue and platysma	3		
– Deep cervical fascia	2		
– Superficial structures of the neck, including sternocleidomastoid, posterior, lateral and anterior cervical regions, surface anatomy and triangles of the neck	1		
– Prevertebral muscles and the root of the neck	2		
– Respiratory layer of cervical viscera	1		
– Endocrine and alimentary layers of cervical viscera	2		
– Surface anatomy of endocrine and respiratory layers of cervical viscera	2		
– Lymphatics of the neck	2		
– Optic, oculomotor, trochlear, trigeminal, abducent, and facial nerves	1		
– Glossopharyngeal, vagus, and spinal accessory nerves	2		
– Olfactory, vestibulocochlear and hypoglossal nerves	3		

1.2 Physiology

By the end of Training Stage 1, trainee must demonstrate knowledge and understanding of physiology as pertains to emergency medicine.

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Principles of cellular function.	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Physiology of nerve cells, including: – General morphology and anatomy – Excitation, conduction, fibre types, neurotransmitters, synapses and neuromuscular transmission	3 1	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Physiology of muscle cells, including: – General morphology and anatomy – Function, metabolism, and electrical and mechanical properties of skeletal and cardiac muscle – Morphology and properties of smooth muscle	2 1 2	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Mechanism of reflexes, such as monosynaptic and polysynaptic reflexes.	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Physiology of smell and taste	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Physiology of sight, including: – Anatomy, pathways and image-forming mechanisms – Eye movements	2 1	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Physiology of hearing and equilibrium, including: – Anatomy, mechanisms of hearing and vestibular functions – Role of hair cells	2 3	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Physiology of alert behaviour, sleep/wake and electrical activity of the brain, including: – Overview – Seizures	3 2	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Principles of control of posture and movement, including: – Corticospinal and corticobulbar system, cerebellum – Role of the midbrain and basal ganglia	1 3	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Physiology of the autonomic nervous system, including anatomy, transmitters and effects.	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Physiology of learning and memory.	3	SEP, SDL	PEx(W) PEx (VIVA) FEx

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Principles of endocrinology.			
– Hypothalamic function, vasopressin and temperature regulation	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Anatomic, cyclic and autonomic considerations	3		
– Water regulation, including diuresis and thirst	2		
– Control of anterior pituitary secretion	2		
– Control of posterior pituitary secretion of oxytocin	3		
– Control of posterior pituitary secretion of vasopressin	1		
+ Physiology of the pituitary gland, including:	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Morphology	2		
– Intermediate-lobe hormones	2		
– Growth hormone	2		
– Physiology of growth	2		
– Pituitary insufficiency	1		
– Pituitary hyperfunction	2		
+ Physiology of the adrenal medulla and adrenal cortex, including:		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Adrenal morphology	2		
– Adrenal medulla and medullary hormones	1		
– Adrenal cortex and cortical hormone synthesis/ metabolism	2		
– Glucocorticoids	1		
– Regulation of glucocorticoid secretion	2		
– Mineralocorticoids	1		
+ Physiology of the thyroid gland and thyroid hormones.	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Hormonal control of calcium and phosphorus metabolism and the physiology of bone including:		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Calcium and phosphorus metabolism	1		
– Bone physiology	2		
– Vitamin D and the hydroxycholecalciferols	3		
– Parathyroid glands	1		
– Calcitonin	3		
– Other renal hormones	3		
+ Principles of reproductive physiology, including		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Sex differentiation and development	3		
– Pituitary gonadotropins and prolactin	3		
– Male reproductive system	2		
– Female reproductive system	2		
– Pregnancy	1		
– Lactation	2		

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Endocrine functions of the pancreas, including:			
– Islet cell structure	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Insulin and regulation of insulin secretion	1		
– Disorders of glucose metabolism	1		
– Glucagon	1		
– Other islet cell hormones	3		
+ Physiology of gastrointestinal function, including:	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Mouth and oesophagus	2		
– Stomach	2		
– Exocrine portion of the pancreas	2		
– Liver and biliary system	1		
– Small and large intestines	2		
– Gastrointestinal hormones	2		
– Gastrointestinal motility	2		
+ Physiology of digestion, absorption and nutrition, including:		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Carbohydrates	2		
– Proteins and nucleic acids	3		
– Lipids	2		
– Absorption of water and electrolytes	1		
– Absorption of vitamins and minerals	2		
+ Cardiovascular physiology, including:		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Cardiac excitation	1		
– Electrocardiogram	1		
– Cardiac arrhythmias	1		
– Electrocardiographic findings in other diseases	1		
– Mechanical events of the cardiac cycle	1		
– Cardiac output	1		
– Cardiac function in health and disease	1		
– Regulatory mechanisms, local regulation, hormonal regulation, regulation by the nervous system	1		
+ Physiology and dynamics of circulating body fluids, including:		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Bone marrow	1		
– Blood cell types	1		
– Haemoglobin	1		
– Platelets	1		
– Blood types	1		
– Plasma	1		
– Haemostasis	1		
– Lymph	3		
+ Dynamics of circulating body fluids, including:		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Biophysics	1		
– Blood circulation, vessels	1		
– Lymphatic circulation	2		
– Interstitial fluid	1		

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Circulation through special regions, including:			
– Cerebral circulation	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Coronary circulation	1		
– Pulmonary circulation	1		
– Renal circulation	1		
– Splanchnic circulation	2		
– Cutaneous circulation	2		
– Placental and foetal circulation	2		
+ Physiology of respiration, including;			
– Anatomy, structure, function	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Control of ventilation	1		
– Gas diffusion	1		
– Pulmonary circulation	1		
– Ventilation-perfusion relationships	1		
– Gas transport by the blood	1		
– Mechanics of breathing	1		
– Respiratory system under stress	2		
– Tests of pulmonary function	3		
– Forced expiration	2		
+ Physiology of the renal system, including			
– Anatomy	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Renal circulation	1		
– Glomerular filtration	1		
– Tubular physiology, regulation of water and electrolyte excretion	1		
– Renal function disorder and diuretics	1		
– The bladder	2		
+ Regulation of extracellular fluid composition, volume and acid-base balance, including			
– Tonicity	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Volume	1		
– Renin-Angiotensin system	1		
– Natriuretic factors	2		
– H+ and bicarbonate regulation	1		
– Acidosis and alkalosis	1		

1.3 Pathology

By the end of Training Stage 1, trainees must demonstrate knowledge and understanding of pathology relevant to emergency medicine.

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Principles of pathology, including mechanisms of cellular injury, cellular adaptation, and acute and chronic inflammation.	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Principles of tissue renewal and repair, including vascular responses to injury, and processes of healing, scar formation, fibrosis, and fibrosis.	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Principles of cutaneous wound healing.	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Fluid and haemodynamic derangements, including: – Oedema – Hyperaemia and congestion – Haemorrhage – Thrombosis – Haemostasis – Embolism – Infarction – Shock	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Features of the immune system and diseases of immunity, including	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Normal immune response	2		
– Hypersensitivity reactions,	1		
– Immunological tolerance and causative mechanisms of autoimmune disease	3		
– Acquired immunodeficiency syndrome (AIDS)	3		
+ Principles of neoplasia, including:	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
– characteristics of benign and malignant neoplasms	1		
– Epidemiology	3		
– Molecular basis of cancer	3		
– Carcinogenic agents	3		
– Clinical features of tumours	2		
+ Principles of infectious disease, including:	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– General principles of microbial pathogenesis	1		
– Viral infections	2		
– CMV, Epstein-Barr, Hepatitis viruses, herpes simplex, HIV, influenza, measles, mumps, varicella-zoster viruses	1		
– Bacterial infections such as chlamydia, rickettsia, mycoplasma	1		
– General features of other infectious diseases, such as fungi, protozoa and helminths	3		
– Malaria	2		
– Emerging infectious diseases	3		

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Principles of environmental pathology, including:	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Personal exposure	3		
– Therapeutic drugs	1		
– Nontherapeutic agents	1		
– Air pollution	3		
– Heavy metals and industrial exposure	3		
– Radiation	3		
– Physical injuries	1		
– Nutritional pathology	3		
+ Blood vessel injury and disease, including:	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Vascular response to injury	2		
– Hypertensive vascular disease	2		
– Atherosclerosis	1		
– Aneurysms and dissections	1		
– Vasculitides	3		
– Veins and lymphatic	3		
– Vascular intervention	3		
+ Principles of cardiac disease, including:	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Heart failure	1		
– Ischaemic heart disease	1		
– Arrythmias	1		
– Valvular heart disease	2		
– Cardiomyopathies	1		
– Pericardial disease	1		
– Congenital heart disease	3		
– Transplantation	3		
+ Principles of blood cell disorders, including:	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Normal development of blood cells	3		
– Anaemias	2		
– Polycythaemia	3		
– Bleeding disorders	2		
– Blood groups, transfusions	2		
– Leukopenia	2		
– Inflammatory white cell proliferation	2		
– Neoplastic white cell proliferation	3		
– Splenomegaly	3		

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Principles of lung disease, including:	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Atelectasis	3		
– Pulmonary congestion and oedema	1		
– Acute lung injury	1		
– Obstructive airways disease	1		
– Diffuse interstitial disease	3		
– Disease of vascular origin	3		
– Pulmonary infections	1		
– Tumours	2		
– Pleural pathology	2		
– Hyperbaric oxygen	3		
+ Principles of disorders and diseases of the gastrointestinal tract, including:	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Oesophagitis	2		
– Oesophageal varices	1		
– Gastritis	2		
– Intestinal obstruction	1		
– Ischaemic bowel disease	1		
– Intestinal inflammatory disorders	2		
– Malabsorption syndromes	3		
+ Principles of liver and biliary tract disease, including:	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
– General features of hepatic disease and liver failure	1		
– Infectious disorders	1		
– Alcoholic liver disease	1		
– Cholelithiasis	1		
– Cholecystitis	1		
+ Principles of pancreatic disease, including:	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Acute pancreatitis	1		
– Chronic pancreatitis	3		
+ Principles of renal disease, including:	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Glomerular disease	3		
– Tubular and interstitial disease	2		
– Hypertensive renal disease	3		
– Urinary tract obstruction	1		
– Urolithiasis	1		
+ Principles of genitourinary pathology, including:	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Disorders and diseases of the testes	2		
– Disorders and diseases of the prostate	3		
– Disorders and diseases of the female genital tract	3		
– Miscarriage, ectopic pregnancy	1		
– Other gestational disorders	2		

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Principles of endocrine pathology, including diseases and disorders of the:	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Pituitary	3		
– Thyroid	2		
– Parathyroid	3		
– Endocrine pancreas	1		
– Adrenal cortex and medulla	2		
+ Principles of musculoskeletal pathology, including:	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Bone remodelling, growth and development	3		
– Osteoporosis	3		
– Paget's disease	3		
– Fractures	1		
– Osteonecrosis	3		
– Osteomyelitis	1		
– Arthritis	2		
+ Principles of peripheral neurological and skeletal muscle pathologies, including:	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Peripheral neuropathies	3		
– Diseases of the neuromuscular junction	3		
– Disease of skeletal muscle	3		
+ Principles of central nervous system diseases and disorders, including:	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Cerebral oedema and raised intracranial pressure	1		
– Trauma	1		
– Cerebrovascular disease	1		
– Infections	1		
– Demyelinating disease	3		
– Degenerative diseases	3		
– Toxic and acquired metabolic diseases	3		
+ Principles of common diseases and disorders of the eye and sight.	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Principles of genetic disorders.	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Principles of diseases and disorders of teeth and supporting structures.	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Principles of diseases and disorders of childhood, including:	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Perinatal infections	2		
– Cystic fibrosis	3		
– Sudden Infant Death Syndrome (SIDS)	2		
+ Principles of common diseases and disorders of the skin, including	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Melanoma	2		
– Other epidermal malignancies	3		
– Rashes, lumps, lesions and ulcers	3		

1.4 Pharmacology

By the end of Training Stage 1, trainees must demonstrate knowledge and understanding of pharmacology relevant to emergency medicine.

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ General principles of pharmacology, including:			
– Pharmacokinetics – absorption, distribution, biotransformation, elimination kinetics	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Pharmacodynamics – mechanisms of action, receptors and their regulation, second messengers/ G protein, dose response, dosing issues	1		
– Prescribing – drugs in the elderly, in children, in pregnancy	2		
+ Pharmacology of specific agents employed in disorders and diseases of the respiratory system, including:		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Methylxanthines	2		
– Sympathomimetic agents	1		
– Disodium cromoglycate	3		
– Muscarinic antagonists	1		
– Antitussives	3		
– Steroids in respiratory disease	1		
+ Pharmacology of specific agents employed in disorders and diseases of the cardiovascular system, including:	1	SEP, SDL	PEx(W) PEx (VIVA) FEx
– Emergency cardiac drugs, including inotropes	1		
– Antianginal drugs, such as nitrates, calcium channel blockers and beta blockers	1		
– Antiarrhythmic agents, such as class 1b sodium channel blockers, class 2 beta blockers, class 3 potassium channel blockers, class 4 calcium channel blockers, adenosine, and magnesium	2		
– Class 1a and 1c sodium channel blockers	1		
– Cardiac glycosides	1		
– Antihypertensives, including beta blockers; ACE inhibitors, angiotensin receptor blockers, vasodilators, centrally acting sympathoplegics, alpha blockers; and adrenergic neuro-blocking agents.	1 2 3		
– Diuretics, including loop diuretics; and thiazide diuretics, potassium sparing diuretics, osmotic diuretics, carbonic anhydrase inhibitors.	1 2		
– Drugs affecting haemostasis, thrombosis, and the haemopoietic system, including anti-platelet agents, anticoagulants, thrombolytics; antifibrinolytics; and haemopoietic agents.	1 2 3		
– Drugs used in dyslipidaemia, including statins; and fibrates and other drugs.	2 3		

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Pharmacology of specific agents used in diseases and disorders of the nervous system, including:		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Neurotransmitters	2		
– Drugs acting on the sympathetic and parasympathetic nervous systems	1		
– Local anaesthesia	1		
– General anaesthesia agents, including induction agents, muscle relaxants, nitrous oxide neuromuscular reversal agents volatile anaesthetics	 1 2 3		
– Antipsychotic agents	3		
– Antidepressives, including Tricyclics, lithium Serotonin-reuptake inhibitors, other agents	 1 2		
– Anticonvulsants: phenytoin, carbamazepine, sodium valproate, levetiracetam all other anticonvulsants	 1 3		
– Hypnotics/sedatives, including Benzodiazepines, barbiturates Newer agents	 1 3		
– Alcohols, including Ethanol, methanol, ethylene glycol Drugs used in acute alcohol withdrawal Drugs used in chronic alcoholism	 1 1 3		
– Anti-Parkinsonian agents	3		
– Anti-migraine agents	2		
+ Pharmacology of antimicrobial agents, including		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Principles of their action	1		
– Beta lactam agents	1		
– Aminoglycosides	2		
– Sulphonamides	2		
– Quinolones	2		
– Antimycobacterial agents	3		
– Metronidazole	1		
– Antifungals	3		
– Antivirals, including HIV prophylaxis	2		
– Disinfectants	2		
– Mechanisms of resistance	2		
– Antiprotozoals, antiparasitics, anthelminthics	3		
– Macrolide agents	2		
– Tetracyclines	2		
– Vancomycin	2		
– Lincosamides	2		
– Other antimicrobial agents	3		

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Pharmacology of the immune system, including		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Histamine antagonists	2		
– Serotonergic agents	3		
– Eicosanoids	3		
– Vaccines	3		
– Immunoglobulins	3		
– Cancer chemotherapy agents	3		
+ Pharmacology of agents employed in disorders and diseases of the endocrine system, including		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Insulin, sulfonylureas/biguanides	1		
– Other drugs used in the management of diabetes	3		
– Glucocorticoids	1		
– Mineralocorticoids	2		
– Sex hormones	3		
– Thyroxine	2		
– Anti-thyroid drugs	3		
– Hypothalamic/pituitary hormone agents	3		
– Drugs affecting bone metabolism	3		
– Octreotide	2		
+ Pharmacology of agents employed in diseases and disorders of the gastro-intestinal tract, including		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Antiemetics	1		
– Antidiarrhoeal	3		
– Laxatives	3		
– Anti-ulcer medications, including H2 receptor antagonists; Proton pump inhibitors; and Other drugs	 2 1 3		
– Antispasmodics	2		
– Topical rectal agents	3		
+ Pharmacology of analgesics and anti-inflammatory agents, including		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Aspirin	1		
– Non-steroidal anti-inflammatory drugs	2		
– Paracetamol	1		
– Anti-gout agents	2		
– Steroids	1		
– Opiates	1		
– Disease modifying anti-rheumatic drugs	3		

Learning Outcomes	Level of assessment	Teaching and Learning Strategies	Assessment
Demonstrate knowledge and understanding of:			
+ Pharmacological principles of toxicology and toxinology, including		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Activated charcoal	1		
– Antidotes, including:			
N-Acetyl cysteine	1		
Naloxone	1		
Flumazenil	1		
Sodium bicarbonate	1		
Antivenoms	2		
Chelating agents	3		
Digoxin antibody fragments	2		
Oximes	3		
– Toxidromes	1		
– Drugs of abuse	2		
– Occupational and environmental pollutants	3		
+ Pharmacology of fluids and electrolytes, including		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Intravenous fluid solutions	1		
– Potassium	1		
– Calcium	1		
– Sodium	1		
– Magnesium	1		
+ Pharmacology of vitamins, including		SEP, SDL	PEx(W) PEx (VIVA) FEx
– Vitamin K	1		
– Vitamin B1	2		
– Other vitamins	3		
+ Pharmacology of common ophthalmic agents	2	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Pharmacology of agents employed in the prevention and treatment of genitourinary infections	3	SEP, SDL	PEx(W) PEx (VIVA) FEx
+ Pharmacology of common dermatologic agents	3	SEP, SDL	PEx(W) PEx (VIVA) FEx

2. Principles of Practice in Emergency Medicine

Principles of medical expertise specific to the provision of immediate recognition, evaluation, care, stabilisation, and disposition of a diverse population of adult and paediatric patients in response to acute or episodic illness and injury in hospital emergency departments, prehospital settings, clinics, community health centres, and aeromedical environments.

2.1 Prehospital Care

By the end of the relevant stage of training, demonstrate clinical expertise in the management of a patient prior to their arrival in the emergency department.

Training stage	Learning Outcomes	Teaching and Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Assist in preparing to accept a patient on arrival to the ED via ambulance. 1.2 Acknowledge the risks of providing telephone advice. 1.3 Redirect incoming callers appropriately, as required.	ST	ITA, FEx
TS2	***Be able to:***		
	2.1 Gather and seek relevant information prior to an expected patient's arrival. 2.2 Utilise a structured approach to accepting communication regarding the arrival of trauma patients from prehospital clinicians. 2.3 Activate the appropriate predetermined hospital response prior to a patient's arrival. 2.4 Provide appropriate site-specific advice regarding limitations in patient care delivery.	ST	ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Limitations of patient transport modalities, and the challenges of performing clinical intervention during transport. 3.2 Physiological responses to changes encountered within the transport environment, including the effect of prolonged transfer. 3.3 Strategies used to mitigate the effects of the transport environment on patients 3.4 Medical, physical and psychological factors that influence management of a patient on scene.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	3.5 Interpret gathered information prior to an expected patient's arrival. 3.6 Prepare to accept and resuscitate an expected patient. 3.7 Dispense clear, simple guidance for patients and doctors phoning for advice, including appropriate time critical instructions. 3.8 Incorporate knowledge of the caller's local health resources when giving advice to off-site clinicians. 3.9 Advise on the need for transfer and appropriate mode of transport for a patient transfer.	ST	ITA, FEx

Training stage	Learning Outcomes	Teaching and Learning Strategies	Assessment
TS4	***Be able to:***		
	4.1 Consider departmental and hospital activity when accepting a patient transfer. 4.2 Direct a patient transfer from the pre-hospital environment to the most appropriate health care facility. 4.3 Advise off-site clinicians on resuscitative measure and further management.	ST	WBA, ITA, FEx

2.2 Initial Emergency Medicine Care

By the end of the relevant stage of training, demonstrate clinical expertise in the provision of initial emergency medicine care.

Training stage	Learning Outcomes	Teaching and Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Perform a rapid and focussed initial patient assessment of a non-critically ill patient, in a culturally safe manner, prior to their entry into the main area of the ED, in order to: (a) Choose and arrange appropriate investigations (b) Provide appropriate first aid treatment for common symptoms (c) Escalate care when high-risk features are identified.	ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Perform a structured initial assessment on a critically ill patient in a culturally safe manner. 2.2 Initiate transfer of the patient from the triage area to the most appropriate location in the emergency department. 2.3 Initiate appropriate time critical intervention	ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Perform a modified risk assessment based on identified high-risk features, taking into account cultural considerations, and arrange time critical investigations. 3.2 Initiate appropriate initial supportive treatment for any presenting problem. 3.3 Generate a provisional and differential diagnosis from minimal information. 3.4 Utilise an increased range of medical and physical therapies to provide initial targeted management.	ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Simultaneously, perform initial patient assessment and commence initial treatment in a patient.	ST	WBA, ITA, FEx

2.3 Resuscitation Medicine

The core business for Emergency Medicine Physicians is the assessment of patients with undifferentiated clinical presentations, particularly those that are of a life/limb/sight threatening nature and require immediate resuscitation, including:

- *Acute confusion/aggression*
- *Acute dizziness*
- *Acute headache*
- *Acute pain*
- *Acute weakness*
- *Altered conscious state/coma*
- *Airway compromise*
- *Apnoea*
- *Arrhythmia with shock*
- *Cardiorespiratory arrest*
- *Critical toxic ingestion/exposure*
- *Envenomation*
- *Extreme temperature abnormalities*
- *Major burn*
- *Major haemorrhage*
- *Major head/spinal injury*
- *Major limb injury*
- *Major torso injury*
- *Missed essential therapy (e.g., dialysis, medications)*
- *Seizure*
- *Severe dyspnoea*
- *Shock*
- *Syncope*

By the end of the relevant stage of training, demonstrate clinical expertise in the management of patients requiring resuscitation in the emergency department.

Training stage	Learning Outcomes	Teaching and Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Consistently use an ABDCE approach to the initial assessment of a patient requiring resuscitation. 1.2 Commence and follow appropriate resuscitation protocols and algorithms, with the understanding that resuscitation has a defined endpoint. 1.3 Assess and support airway and ventilation. 1.4 Recognise shock and pre-shock states in patients and initiate basic circulatory resuscitation. 1.5 Perform a brief neurological assessment, with a focus on level of consciousness, pupillary activity and peripheral nervous system assessment. 1.6 Initiate simple interventions to optimise and support the patient's neurological function. 1.7 Initiate appropriate non-invasive temperature control measures. 1.8 Identify patients that may require decontamination.	SEP, SDL, ST	WBA, ITA, FEx

Training stage	Learning Outcomes	Teaching and Learning Strategies	Assessment
TS1 continued	1.9 Independently perform the following procedures: (a) Basic airway manoeuvres in an adult or a child, including chin lift, jaw thrust, head tilt and positioning (b) Insertion of oropharyngeal or nasopharyngeal airway (c) Use of oxygen delivery devices (d) Use of self-inflating bag for ventilation (e) Adult, child and infant external chest compressions (f) Defibrillation (g) Venepuncture (h) Adult peripheral intravenous access, including large bore (16G) (i) Arterial puncture or blood sampling (j) Preparation of an intravenous fluid or blood product line (k) Insertion of a nasogastric tube or orogastric tube (l) Insertion of an adult urinary catheter (m) Sizing and application of a rigid cervical collar (n) In-line cervical spine immobilisation (o) Full spinal immobilisation, log roll and transfer (p) Interpret pulse oximetry (q) Interpret end-tidal CO2	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Apply understanding of basic sciences and common resuscitative treatments to the performance of a systematic concurrent assessment and resuscitation using first line therapeutic interventions. 2.2 Institute targeted first line circulatory resuscitation. 2.3 Demonstrate an approach to the management of: (a) Abnormalities in airway and/or ventilation (b) Severe abnormalities in circulation (c) Temperature trends in resuscitation 2.4 Assess the airway of a critically ill patient prior to performing definitive treatment. 2.5 Perform a focused neurological assessment specifically aimed at detecting or ruling out specific pathologies. 2.6 Initiate basic invasive temperature control measures targeted at a defined treatment goal.	SEP, SDL, ST	WBA, ITA, FEx

Training stage	Learning Outcomes	Teaching and Learning Strategies	Assessment
TS2 continue	2.7 Independently perform the following procedures: (a) Insertion of a laryngeal mask airway (b) Spirometry and peak flow measurement (c) Use adult non-invasive inflation device (d) Paediatric peripheral intravenous access (e) Insertion of a rapid infusion catheter (f) Intraosseous access (g) Preparation and operation of transport monitoring equipment (h) Replacement of suprapubic catheter (i) Abdominal paracentesis and insertion of drain (j) Emergent fracture/dislocation reduction (k) Application of pelvic binding device (l) Application of traction splinting device (m) Administration of chemical restraint	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Indirect laryngoscopy (use of dental mirror to examine for foreign body).	ST	WBA, ITA, FEx
	Be able to:		
	3.2 Complete a systematic concurrent assessment and resuscitation using a broader range of therapeutic interventions. 3.3 Synthesise clinical information found on initial assessment to form both a provisional diagnosis and a differential diagnosis. 3.4 Secure a definitive airway and successfully ventilate the patient. 3.5 Anticipate and act to prevent complications in the management of airway and/or ventilation. 3.6 Initiate advanced circulatory resuscitation targeted at defined treatment goals. 3.7 Arrange appropriate ongoing supportive management during and after resuscitation. 3.8 Proactively search for life threatening conditions and perform lifesaving interventions, as required. 3.9 Recognise scenarios where ongoing resuscitation may be non-beneficial. 3.10 Demonstrate an approach to the “can’t intubate, can’t oxygenate” scenario. 3.11 Establish the likely aetiology of the shocked state. 3.12 Anticipate and prevent complications from shock and its treatment. 3.13 Initiate treatments specific to neurological pathologies. 3.14 Anticipate and act to prevent secondary neurological injury. 3.15 Anticipate and act to prevent the potential complications of body temperature control and management.	SEP, SDL, ST	WBA, ITA, FEx

Training stage	Learning Outcomes	Teaching and Learning Strategies	Assessment
TS3 continued	3.16 Independently perform the following procedures: (a) Video laryngoscopy and other rescue/difficult airway devices (b) Extubation (c) Set up a transport ventilator (d) Decompression needle/finger thoracostomy (e) Pleurocentesis (f) Tube thoracostomy (g) DC cardioversion (h) External pacing (i) Arterial line insertion (j) Insertion of a central venous line (k) Emergency pericardiocentesis (l) Insertion of an infant urinary catheter (m) Suprapubic aspiration of urine in an infant (n) Insertion of a suprapubic catheter (o) Insertion of oesophageal and gastric balloon devices (p) Emergency replacement of a dislodged gastrostomy tube (q) Interpret capnography (r) Administer procedural sedation (s) Regional anaesthesia, including Biers Block (t) Direct laryngoscopy, insertion of oral ETT, use of RSI technique (including drugs, stylet, bougie) (u) Secure and care for ETT, including during transport (v) Haemorrhage control, including facial packing/tamponade, pressure dressing, tourniquet application, haemostatic suturing of lacerations, wound stapling	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Demonstrate knowledge and understanding of:***		
	4.1 Principles of resuscitative thoracotomy, including indications and contraindications. 4.2 Principles of resuscitative hysterotomy, including indications and contraindications. 4.3 Principles of other types of endo-tracheal tubes, including nasal and double lumen including indications and contraindications.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to		
	4.4 Adapt resuscitation skills to any patient presentation of any complexity. 4.5 Define the treatment goals for resuscitation. 4.6 Recognise and expedite any specific intervention essential to resuscitation. 4.7 Cease resuscitation when a defined endpoint is reached. 4.8 Apply knowledge of clinical injury and illness outcomes when counselling and debriefing after resuscitation. 4.9 Definitively manage the “can’t intubate, can’t oxygenate” scenario. 4.10 Adapt management of any circulatory emergency. 4.11 Incorporate definitive neurological interventions within a resuscitative management plan.	SEP, SDL, ST	WBA, ITA, FEx

Training stage	Learning Outcomes	Teaching and Learning Strategies	Assessment
TS4 continued	4.12 Initiate advanced invasive temperature control measures. 4.13 Independently perform the following procedures under simulation: (a) Insertion of cricothyroid needle and jet insufflation of oxygen (b) Cricothyroidotomy in an adult (c) Emergency replacement of blocked or dislodged tracheostomy tube (d) Use non-self-inflating bag for ventilation (e) Use paediatric device	SEP, SDL, ST	WBA, ITA, FEx

2.4 Focused Assessment

Presentations list

Focused assessment of patients with undifferentiated presentations in emergency departments occurs irrespective of immediate resuscitation measures that may be required. Those presentations include:

- Abdominal pain/distension
- Abnormal test result
- Altered behaviour
- Altered motor function
- Altered mood
- Altered sensation
- Anxiety
- Behaviour disturbance
- Bite/sting
- Bleeding
- Breathing difficulty
- Burn
- Collapse
- Complication of treatment/procedure
- Confusion/disorientation
- Constipation
- Contusion
- Cough
- Deformity
- Dehydration
- Delusion
- Diarrhoea
- Discharge/exudate
- Dizziness
- Drug/medication related presentation
- Dyspnoea
- Erythema
- Falls/unsteadiness
- Feeding problems
- Fever
- Foreign body
- Hallucinations/psychosis
- Headache
- Hypertension
- Infection/infestation
- Injury
- Jaundice
- Lethargy
- Limp
- Lump
- Minor limb injury
- Mobility/movement problems
- Pain
- Pregnancy
- Poisoning
- Rash
- Skin lesion
- Situational crisis
- Social crisis
- Speech disturbance
- Sprain/strain
- Swelling/oedema
- Urinary dysfunction
- Visual loss/disturbance
- Vomiting
- Weakness
- Weight loss
- Wound

By the end of the relevant stage of training, trainees must demonstrate clinical expertise in undertaking a focused assessment on patients in the emergency department.

Training stage	Learning Outcomes	Teaching and Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Importance of accurate history taking as the major contributor to the diagnostic process. 1.2 Impact of social and cultural factors on the patient's history.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.3 Use universal precautions when performing any assessment. 1.4 Consistently use a patient-centred approach when performing patient assessment, taking into account gender, sexuality, cultural background and religious beliefs. 1.5 Identify the presence or absence of relevant physical signs in an appropriate examination, taking into account how social and cultural differences impact upon physical examination findings. 1.6 Perform a detailed subsequent systematic culturally sensitive assessment in patients with more complex presentations. 1.7 Develop a problem list for a patient presentation, taking into consideration the patient's social and cultural background. 1.8 Generate a differential diagnosis to match each problem by linking all the history, symptoms and signs found on assessment. 1.9 Apply knowledge of basic sciences and natural progression of disease to the patient's presenting complaint. 1.10 Act on time critical investigations results as they arise. 1.11 Apply knowledge of basic sciences to the analysis of raw information from investigations. 1.12 Apply understanding of indications for the following investigations, their theoretical accuracy, principles underpinning their performance and interpretation of formal reports to patient care: (a) Tests for inborn errors of metabolism (urine and serum) (b) Tumour markers (c) Histopathology (d) Cytology 1.13 Under direct supervision, analyse results of fasting lipids investigations. 1.14 Independently analyse and interpret results of the following investigations (a) 12-lead ECG patterns or patterns on ECG rhythm strip, including: i) Screening in asymptomatic adult patient – recognition of normal adult ECG, artefact, paced rhythm and lead misplacement ii) Identification of obvious cause of chest pain/SOB, e.g., localised ST segment elevation or depression indicative of acute ischaemia iii) Identification of obvious cause of syncope/palpitations, e.g., cardiac arrest rhythms, ventricular tachycardia or atrial tachyarrhythmia, prolonged QT interval iv) Identification of life-threatening electrolyte or toxicology abnormalities, e.g., hyperkalaemia, tricyclic anti-depressant (b) Spirometry/peak flow meter measurement	SEP, SDL, ST	WBA, ITA, FEx

Training stage	Learning Outcomes	Teaching and Learning Strategies	Assessment
TS1 continued	(c) Plain radiology images, including chest x-ray (all views), cervical spine, pelvis, abdominal x-ray (all views) (d) Laboratory investigations, including: i) Full blood count – haemoglobin (HB), mean cell volume (MCV), white cell count (WCC) and differential (diff), platelet count (Plt) ii) Blood film, including malaria thick and thin films iii) Reticulocyte count, bleeding time iv) INR, APTT, D-Dimer v) Blood glucose (bedside and formal) vi) Electrolytes, urea, creatinine vii) Creatinine kinase viii) Calcium, magnesium, phosphate ix) Cardiac enzymes x) Liver function tests, amylase, lipase xi) Paracetamol levels xii) Urine dipstick and beta Human Chorionic Gonadotropin (bhCG) xiii) Microbiology culture results	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Complete a focused clinical assessment while simultaneously looking for evidence of time critical diagnoses. 2.2 Recognise inconsistencies within elements of the focused assessment that require clarification. 2.3 Recognise the contribution of social and cultural complexities in clinical assessment of history and examination. 2.4 Seek collateral history to support clinical findings in a socially and culturally safe manner. 2.5 Formulate a provisional diagnosis to match the immediate issues. 2.6 Incorporate the concepts of likelihood and severity of disease into the differential diagnosis, inclusive of the social determinants of health. 2.7 Incorporate investigation results into the diagnostic reasoning process. 2.8 Perform rational investigation selection after completing a patient's clinical assessment. 2.9 Under direct supervision, analyse the results of the following investigations: (a) Advanced inflammatory markers (Rh factor, ANA, ANCA) (b) Parathyroid hormones, cortisol/ACTH/Synacthen test 2.10 Independently analyse and interpret results of the following investigations: (a) 12-lead ECG patterns or patterns on ECG rhythm strip, including: i) Identification of other cause of chest pain/SOB, e.g., ischaemia-related syndromes, pathological Q waves, atypical ischaemic patterns, ventricular hypertrophy, PR depression, acute right ventricular strain, ischaemia mimics ii) Identification of other causes of syncope/palpitations, e.g., 1st, 2nd, 3rd degree heart block, bundle branch blocks, fascicular blocks, Brugada syndromes, pacemaker problems iii) Identification of other medical problems, e.g., temperature, calcium, digoxin	SEP, SDL, ST	WBA, ITA, FEx

Training stage	Learning Outcomes	Teaching and Learning Strategies	Assessment
TS2 continued	(b) pH testing of eye tears (c) plain radiology images, including long bones, clavicle, scapula, patella, OPG (d) CT images, including: i) CT head (plain) for assessment of life-threatening causes of abnormal neurology ii) CT kidneys, ureters, bladder, e.g., identification of calculus, signs of obstruction, AAA (e) Laboratory investigations, including: i) Blood gas analysis (arterial and venous) ii) Fibrinogen, fibrinogen degradation products iii) Erythrocyte sedimentation rate and C-reactive protein iv) Quantitative bHCG v) Serum osmolality vi) Serum lactate vii) Thyroid function tests, iron studies, HbA1c, drug levels, serum/RBC folate viii) Microbiology specific antigen results (PCR), malaria detection tests ix) Viral serology tests (EBV, CMV, hepatitis, HIV, varicella) x) Body fluid analysis (CSF, joint, pleural, peritoneal)	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Adapt the focused clinical assessment to situations with a paucity of clinical information. 3.2 Complete an accurate focused clinical assessment of an undifferentiated patient within a limited timeframe. 3.3 Tailor a socially and culturally safe assessment style to the patient and the situation. 3.4 Complete a focused clinical assessment of a patient to clarify the findings of a junior clinician. 3.5 Refine the provisional diagnosis as more information comes to hand. 3.6 Create a focused investigation plan that concentrates on confirming or excluding time critical diagnoses. 3.7 Under direct supervision, analyse results from the following investigations: (a) Cardiac exercise stress test (b) Cardiotocography (c) Nerve conduction studies (d) Image from nuclear medicine or MRI, including: i) VQ scan ii) Bone scan iii) MRI brain and spinal cord iv) Echocardiogram (e) Cholinesterase levels for toxicology monitoring	SEP, SDL, ST	WBA, ITA, FEx

Training stage	Learning Outcomes	Teaching and Learning Strategies	Assessment
TS3 continued	3.8 Independently analyse and interpret results of the following investigations: (a) 12-lead ECG patterns or patterns on ECG rhythm strip, including: i) Screening in paediatric patient, e.g., recognition of a normal paediatric ECG ii) Identification of non-obvious cause of syncope/palpitations, e.g., re-entry pathways, different types of VT (b) Formal respiratory function test (c) Plain radiology images, e.g., paediatric CXR, AXR, cervical spine, pelvis, extremities; adult small bones; paediatric extremities; thoracolumbar spine; facial (all views); soft tissue neck (d) CT images including: i) CT head (+/- contrast) for assessment of acute important findings, e.g., mass lesion, hydrocephalus, pneumocephalus, radiological signs of increased intracranial pressure ii) CT face and orbits, e.g., fracture or orbital entrapment iii) CT thorax (+/- contrast) for assessment of acute important findings, e.g., fracture, pneumothorax, haemothorax, infiltrative process, effusion or consolidation, major vessel aneurysm, dissection, rupture or occlusion iv) CT spine, e.g., fracture or disc prolapse v) CT abdomen/pelvic, e.g., organ perforation/laceration, mass lesion, inflammatory process, major vessel dissection or rupture vi) CT other bones (neck of femur, foot, ankle), e.g., fracture or mass lesion, disrupted anatomy vii) CT aortogram, CTPA, e.g., massive pulmonary embolus or obvious aortic dissection 3.9 Images obtained by a FACEM credentialled to perform ED sonography, including cardiac arrest ECG or FELS, to assess cardiac activity during resuscitation 3.10 Laboratory investigations, including drug levels, urine osmolality, urinary sodium, and snake venom detection kit tests	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Conduct a fragmented focused assessment which becomes whole over time. 4.2 Summarise and prioritise the key issues that must be addressed during and following the emergency encounter, considering health literacy, and the knowledge of and access to health services, as factors influencing community care. 4.3 Adapt the technique of provision of information to the needs of the patient and/or their family/whānau. 4.4 Justify investigation selection based on the patient's presentation, pre-test probability, risk-benefit ratio and resources of the local health service.	SEP, SDL, ST	WBA, ITA, FEx

Training stage	Learning Outcomes	Teaching and Learning Strategies	Assessment
TS4 continued	4.5 Under direct supervision, analyse the following investigations: (a) Stress Thallium/Sestamibi scan (b) MRI bones (c) MRI soft tissues 4.6 Independently analyse and interpret results of cholinesterase levels for toxicology monitoring.	SEP, SDL, ST	WBA, ITA, FEx

2.5 Analysis of Investigations

In the process of diagnosis, Emergency Medicine Physicians integrate their medical expertise with information gleaned from focussed assessment, including observations, patient history, physical examination findings, investigation results, and responses to therapeutic interventions. With specific regard to investigations, including those listed below, Emergency Medicine Physicians are expected to:

- Demonstrate understanding of indications for the investigation;
- Demonstrate understanding of the theoretical accuracy of the investigation using knowledge of statistics;
- Demonstrate understanding of how the investigation is undertaken, underpinned by knowledge of the basic sciences that form the foundations of emergency medicine;
- Perform rational test selection;
- Identify, describe and evaluate relevant investigation findings and understand possible causes for a given result; and
- Incorporate the evaluation of investigation results to the refinement of a patient's differential diagnosis and management plan.

For the majority of the investigations listed below, and described in further detail throughout the Medical Expertise domain of the FACEM Curriculum, Emergency Medicine Physicians are required to independently analyse and apply findings to diagnosis and patient management, confirmed though limited supervision and supplemented by use of references and conferral with colleagues, when necessary. The following list provides guidance to trainees, supervisors and assessors with respect to the level of practice expected of trainees as they progress through each stage of the FACEM Training Program. It is expected that trainees will acquire the requisite knowledge and skills to analyse and apply investigation results **under the direct supervision (S)** of senior clinicians, and advance to doing so at an **independent (I)** level of practice with further experience and consolidation of skills, through both direct management of patient presentations and the discussion of cases managed by colleagues. More complex investigations are to be analysed under the direct supervision of other suitably credentialled clinicians, or via formal reports provided by them.

The analysis of investigations is learned through the structured education program of the accredited training site and through supervised training, and is assessed in the Primary VIVA examination, the workplace-based assessments (WBAs), and both Fellowship examinations.

Investigations	Level of practice S = under direct supervision I = independently			
	End TS1	End TS2	End TS3	End TS4
12 lead ECG patterns or patterns on ECG rhythm strip				
+ ECG: screening in asymptomatic adult patient Recognition of a normal adult ECG, artefact, paced rhythm and lead misplacement	I			
+ ECG: screening in asymptomatic paediatric patient Recognition of a normal paediatric ECG		S	I	
+ ECG: identification of obvious cause of chest pain/SOB e.g. localised ST segment elevation or depression indicative of acute ischaemia	I			
+ ECG: identification of other cause of chest pain/SOB e.g. ischemia related syndromes (Wellen's Syndrome), pathological Q waves, atypical ischaemic patterns, left or right ventricular hypertrophy, PR depression, acute right ventricular strain, ischaemia mimics	S	I		
+ ECG: identification of obvious cause of syncope/palpitations e.g. cardiac arrest rhythms, ventricular tachycardia or atrial tachyarrhythmia, prolonged QT interval	I			
+ ECG: identification of other cause of syncope/palpitations e.g. st, DSnd or IPrd degree heart block, bundle branch blocks, fascicular blocks, Brugada syndromes, pacemaker problems-issues	S	I		
+ ECG: identification of non-obvious cause of syncope/palpitations e.g. re-entry pathways, different types of VT		S	I	
+ ECG: identification of life-threatening electrolyte or toxicology abnormalities e.g. hyperkalemia, tricyclic anti-depressant	I			
+ ECG: identification of other medical problems e.g. temperature, calcium, digoxin	S	I		
Bedside functional investigations				
+ Spirometry/ Peak Flow Meter measurement	S	I		
+ pH testing of eye tears	S	I		
Other functional investigations				
+ Formal respiratory function test		S	I	
+ Cardiac exercise stress test			S	
+ Cardiotocography (CTG)			S	
+ Nerve conduction studies			S	
Plain radiology images				
+ CXR (all views)	I			
+ Cervical Spine	I			
+ Pelvis	I			
+ AXR (all views)	I			

Investigations	Level of practice S = under direct supervision I = independently			
	End TS1	End TS2	End TS3	End TS4
Plain radiology images (continued)				
+ Paediatric CXR/AXR/Cervical Spine/ Pelvis		S	I	
+ Extremities – long bones, clavicle, scapula, patella	S	I		
+ Extremities – small bones		S	I	
+ Paediatric extremities		S	I	
+ Thoracolumbar Spine		S	I	
+ OPG	S	I		
+ Facial (all other views)		S	I	
+ Soft tissue neck		S	I	
+ Other plain radiology films e.g. skeletal survey, skull, bowel series			S	I
CT images				
+ CT head (plain): life-threatening cause of abnormal neurology e.g. Haemorrhage, mass effect, skull fracture	S	I		
+ CT head (+/- contrast): other acutely important findings e.g. Mass lesion, hydrocephalus, pneumocephalus, radiological signs of increased intracranial pressure		S		
+ CT face and orbits e.g. Fracture or orbital entrapment		S	I	
+ CT thorax (+/- contrast) – acutely important findings e.g. Fracture, pneumothorax, haemothorax, infiltrative process, effusion or consolidation, major vessel aneurysm, dissection, rupture or occlusion		S	I	
+ CT Spine e.g. Identification of fracture or disc prolapse		S	I	
+ CT kidneys, ureters, bladder e.g. identification of calculus, signs of obstruction, AAA	S	I		
+ CT abdomen/pelvis e.g. Identification of organ perforation/laceration, mass lesion, inflammatory process, major vessel dissection or rupture		S	I	
+ CT other bones (neck of femur, foot, ankle) e.g. Identification of fracture or mass lesion, or disrupted anatomy		S	I	
+ CT Aortogram, CTPA e.g. Identification of massive pulmonary embolus or obvious aortic dissection		S	I	
Ultrasound				
+ Cardiac arrest echocardiogram		S	I	
+ Echocardiogram			S	

Investigations	Level of practice S = under direct supervision I = independently			
	End TS1	End TS2	End TS3	End TS4
Ultrasound (continued)				
+ EFAST ultrasound Identification of intraperitoneal free fluid, haemothorax, pneumothorax or cardiac tamponade			S	I
+ FELS Identification of pericardial effusion, cardiac activity, LV systolic function, RV strain, gross volume assessment			S	I
+ AAA ultrasound Identification and localisation of abdominal aortic aneurysm			S	I
+ Lung ultrasound Identification of pleural/ pulmonary pathology			S	I
+ Obstetric/gynaecological ultrasound e.g., assessment of intrauterine pregnancy			S	
+ Soft tissue ultrasound Presence or absence of foreign body or abscess			S	
+ Hepatobiliary ultrasound			S	
+ Advanced haemodynamic assessment protocols			S	S
+ Doppler for DVT			S	
+ Doppler of carotid arteries			S	
+ Ultrasound for ruptured tendons and joints			S	
+ Renal Ultrasound			S	
Nuclear medicine imaging and MRI				
+ VQ scan			S	
+ Bone Scan			S	
+ Stress Thallium/Sestamibi scan				S
+ MRI Brain and spinal cord			S	
+ MRI Bones				S
+ MRI Soft Tissues				S
Laboratory investigations				
+ Blood Gas Analysis (arterial and venous)	S	I		
+ Full Blood Count (Hb, MCV, WCC and diff, Plt)	I			
+ Blood film, including malaria thick and thin films	I			
+ Reticulocyte count, Bleeding time	I			
+ INR, APTT, D-Dimer	I			
+ Fibrinogen, Fibrinogen degradation products	S	I		

Investigations	Level of practice S = under direct supervision I = independently			
	End TS1	End TS2	End TS3	End TS4
Laboratory investigations (continued)				
+ Blood Glucose (bedside and formal)	I			
+ Electrolytes, Urea, Creatinine	I			
+ Creatinine Kinase	I			
+ Calcium, Magnesium, Phosphate	I			
+ Erythrocyte sedimentation rate and C-reactive protein	S	I		
+ Cardiac enzymes	I			
+ Quantitative beta HCG	S	I		
+ Serum osmolality	S	I		
+ Serum Lactate	S	I		
+ Liver Function Tests, Amylase, Lipase	I			
+ Thyroid Function Tests, Iron studies, HbA1c, Drug Levels, Serum/RBC folate	S	I		
+ Paracetamol levels	I			
+ Other drug levels		S	I	
+ Cholinesterase levels for toxicology monitoring			S	I
+ Urine Dipstick and beta HCG	I			
+ Urine osmolality, urinary sodium		S	I	
+ Microbiology culture results	I			
+ Microbiology specific antigen results (PCR), Malaria detection tests	S	I		
+ Viral serology tests (EBV, CMV, Hepatitis, HIV, varicella)	S	I		
+ Snake venom detection kit tests			I	
+ Body fluid analysis (cerebrospinal fluid, joint, pleural, peritoneal)	S	I		
+ Fasting lipids	S			
+ Advanced inflammatory markers (Rh Factor, ANA, ANCA)		S		
+ Parathyroid hormones, cortisol/ACTH/Synacthen test		S		
+ Tests for inborn errors of metabolism (urine and serum)	S			
+ Tumour markers	S			
+ Histopathology	S			
+ Cytology	S			

2.6 Ultrasound in the emergency department

By the end of the relevant stage of training, demonstrate knowledge of ultrasound imaging and apply this understanding to practice in emergency medicine.

Training Stage	Learning outcomes	Teaching and learning strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Physics of ultrasound waves and artefacts production 1.2 Ultrasound machine controls and image optimisation 1.3 Bio-effects, safety, infection control and machine maintenance 1.4 Normal anatomy as viewed in ultrasound images, as pertains to FELS, EFAST, AAA, and lung ultrasound.	eLM, SEP, ST, WS	FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Obvious pathologies as viewed in ultrasound images. 2.2 The role of common bedside ultrasound skills used in resuscitation assessment, including: (a) Focused Echocardiography in Life Support (FELS) (b) Extended Focused Assessment with Sonography for Trauma (EFAST) (c) Abdominal Aortic Aneurysm (AAA) assessment 2.3 The role of ultrasound guided procedures when resuscitating adults, including peripheral and central venous access.	eLM, SEP, ST, WS	FEx
	Be able to		
	2.4 Perform ultrasound-guided insertion of peripheral IV cannula.	SEP, ST, WS	WBA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 The role of bedside ultrasound used in the resuscitation assessment of lungs in adult patients. 3.2 Advantages and disadvantages of procedural ultrasound guidance of a needle when compared to performance based on anatomical landmarks, including common nerve blocks and central venous access. 3.3 The role of bedside ultrasound in paediatric emergency resuscitation. 3.4 Findings and limitations of limited and comprehensive ultrasound assessment in emergency medicine.	eLM, SEP, ST, WS	FEx
	Be able to		
	3.5 Incorporate bedside ultrasound assessment results in diagnostic reasoning, including: (a) First trimester ultrasound for the presence or absence of intrauterine pregnancy (b) Formal pregnancy/gynaecological pelvic ultrasounds (c) Hepatobiliary ultrasound (d) Renal ultrasound (e) Doppler for vascular applications (f) Ultrasound for ruptured tendons and joints (g) Soft tissue ultrasound 3.6 Perform Focused Echocardiography in Life Support (FELS) for the detection of cardiac activity during cardiac arrest	eLM, SEP, ST, WS	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching and learning strategies	Assessment
TS3 continued	3.7 Perform the following ultrasound-guided procedures: (a) Central IV cannula insertion (b) Femoral nerve and fascia iliaca blocks	SEP, ST, WS	WBA, FEx
TS4	***Demonstrate knowledge and understanding of:***		
	4.1 Advanced applications of bedside ultrasound beyond the resuscitation setting, including: (a) Needle-guided procedures beyond vascular access (b) Combining lung, FELS, AAA and EFAST scanning into haemodynamic assessment protocols, e.g., RUSH (c) Other disease presentations, e.g., assessment of free peritoneal fluid to suspected ectopic or assessment of ascites, vascular presentations, other abdominal presentations, soft tissue pathology, obstetric and gynaecological presentations.	eLM, SEP, ST, WS	WBA, ITA, FEx
	Be able to		
	4.2 Perform the following ultrasound-guided procedures, in-plane or out-of-plane: (a) Pleural drains (b) Ascitic drains (c) Joint aspirations		
	4.3 Perform the following ultrasound assessments: (a) FELS (effusion, cardiac activity, LV systolic function, RV strain, gross volume assessment) (b) AAA (detection of aneurysm) (c) EFAST (pneumothorax, fluid in pericardium, thorax or peritoneum, distended bladder) (d) Lung (lung sliding, interstitial syndrome, consolidation, effusions, pneumothorax, pulmonary oedema)	eLM, SEP, ST, WS	WBA, ITA, FEx
	4.4 Adjust clinical decisions based on image quality and diagnostic performance of ultrasound.		

2.7 Treatment

By the end of the relevant stage of training, demonstrate clinical expertise in the treatment of patients in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Recognise treatments outside the scope of emergency medicine. 1.2 Create a basic treatment plan integrating the knowledge of basic sciences, according to the patient's provisional diagnosis. 1.3 Synthesise clinical information to select an appropriate procedure, as required.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Implement definitive treatment plans once the diagnosis is determined. 2.2 Demonstrate individualised and family/whānau-centred care that considers the cultural needs of the patient when creating a treatment plan.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Recognise limitations of emergency medicine care. 3.2 Recognise the barriers to provision of adequate emergency medicine care that patients of different social and cultural backgrounds may encounter. 3.3 Modify the initial treatment plan in response to newly discovered clinical information. 3.4 Tailor the treatment to the individual patient and situation. 3.5 Safely use critical care monitoring equipment.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Adapt standard therapies to any patient presentation of any complexity. 4.2 Rectify sub-optimal treatment plans. 4.3 Manage unforeseen complications when performing a procedure.	SEP, SDL, ST	WBA, ITA, FEx

2.8 Observational Medicine

By the end of the relevant stage of training, demonstrate clinical expertise in the management of patients in the observational or short stay units in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Apply understanding of basic pathophysiology of common illnesses and injuries to patients cared for in Observational Medicine. 1.2 Recognise patients who meet criteria for admission or who require further evaluation. 1.3 Ensure the required interventions are performed during the ED admission. 1.4 Recognise and respond to a deteriorating patient and initiate initial resuscitation.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Synthesise the data available to provide the correct diagnosis and determine the urgency and appropriateness of further investigation or therapy required. 2.2 Develop a rational plan of investigation and therapy for a specific admission diagnosis. 2.3 Monitor the effectiveness of interventions at timely intervals whilst the patient is in ED.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Apply understanding of natural history of common illnesses and injuries to patients cared for in Observational Medicine. 3.2 Consider alternative diagnoses and therapies for a patient under observation and changes plan accordingly. 3.3 Recognise patients who do not respond to therapy as expected and adjust the approach accordingly. 3.4 Escalate care, including referral for inpatient care as required. 3.5 Manage the deteriorating patient appropriately. 3.6 Utilise available clinical and allied health resources, including Indigenous/Aboriginal Health Liaison Officers, in management of the patient and subsequent discharge.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Apply understanding of cost-effective ordering of diagnostic studies based on the pre-test probability of disease and the likelihood of the result altering further management to patients cared for in Observational Medicine. 4.2 Discriminate between conflicting diagnostic results. 4.3 Apply understanding of roles, availability and capability of community healthcare, including services tailored to support a patient's social and cultural needs, to patients cared for in Observational Medicine. 4.4 Function of chest pain units, their use, and effects on patient flow within emergency departments.	SEP, SDL, ST	WBA, ITA, FEx

2.9 Documentation and Handover

By the end of the relevant stage of training, demonstrate expertise in the development and maintenance of appropriate documentation and the conduct of clinical handover in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Detail required for adequate, concise and legally sound documentation in emergency medicine.	SEP, ST	WBA, ITA, FEx
	Be able to:		
	1.2 Use clinical notes to reflect the sequence of events during a patient encounter. 1.3 Apply understanding of the purpose of a discharge letter and admission documentation by recording clear discharge or admission orders. 1.4 Document handover of patient care. 1.5 Convey clinical information in a structured format during handover.	ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Record performance of procedures, including consent and management of complications. 2.2 Write discharge letters that summarise important, relevant information for community health professionals. 2.3 Extract salient points relating to the patient's care and present these in a structured manner during handover. 2.4 Clearly transfer unfinished assessment and management tasks during handover. 2.5 Clarify outstanding tasks when receiving a handover.	ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Produce succinct patient records and convey clinical reasoning when documenting a patient encounter. 3.2 Ensure clear documentation of the purpose and findings of a requested patient review. 3.3 Record advanced care orders, limitations of treatment and their reasons. 3.4 Reassess and review management of the handover patient.	ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Write a concise and accurate summary of key issues in any patient's care. 4.2 Ensure that outstanding tasks handed over are relevant to the current emergency encounter. 4.3 Clarify and focus the clinical reasoning of the clinician providing information during handover.	ST	WBA, ITA, FEx

2.10 Patient Disposition

By the end of the relevant stage of training, demonstrate clinical expertise in the management of patient disposition in the emergency department.

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Create a clear clinically and culturally safe discharge plan for a patient. 1.2 Provide clear instructions for the patient/carer on discharge and ensure comprehension, including the likely progression of their clinical course, and reasons to return for review. 1.3 Provide the necessary discharge documentation. 1.4 Write an admission plan which addresses immediate and ongoing interim care for a stable patient.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Predict and facilitate ongoing treatment after the emergency encounter. 2.2 Identify risk factors associated with patients/carers wanting to cease their emergency care prematurely. 2.3 Escort a stable patient within a hospital to a high dependency unit. 2.4 Clearly define the transition between emergency care and inpatient care in the patient journey.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Identify the vulnerable patient who will require further support on discharge. 3.2 Implement strategies to prevent a patient ceasing their emergency care prematurely. 3.3 Transfer a critically unwell patient for further investigation and/or definitive care within a hospital. 3.4 Prepare a stable patient for transfer to another hospital for definitive care. 3.5 Decide and rationalise an admission of a patient to a specific inpatient unit based on a provisional diagnosis and expected clinical course.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Specify the resources that will be required to address ongoing post-disposition needs, with consideration of social and cultural factors. 4.2 Decide which delayed results prompt a recall of a patient to the emergency department for assessment. 4.3 Create a plan that matches the level of risk for a patient who has ceased their emergency care prematurely. 4.4 Prepare a critically unwell patient for transfer to another hospital for definitive care. 4.5 Arrange the transfer of a patient to another hospital. 4.6 Perform an emergency escort of an unstable patient for definitive management when required. 4.7 Confirm and enhance admission plans created by more junior clinicians working within the emergency department.	SEP, SDL, ST	WBA, ITA, FEx

3. Clinical Management in Emergency Medicine

Integrate understanding of foundations of emergency medicine with principles of practice in the focused assessment, diagnosis and management of undifferentiated clinical presentations.

3.1 Cardiovascular Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of cardiovascular presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Aetiology and pathophysiology of: (a) Congestive cardiac failure (b) Valvular disorders, including aortic, mitral, tricuspid and pulmonary, and conditions associated with valvular disorders, including rheumatic heart disease (c) Disorders of the myocardium, including cardiomyopathy, aneurysm, atrial septal defect, ventricular septal defect, dextrocardia (d) Disorders of the pericardium, including acute pericarditis, constrictive pericarditis, pericardial effusion, pericardial tamponade, pericardiocentesis (e) Cardiogenic shock (f) Hypertension (g) Disorders of peripheral vasculature, including peripheral ischaemia, deep vein thrombosis, pulmonary embolism, mesenteric ischaemia (h) Endocarditis (i) Tumours (j) Congenital heart disease, including cyanotic heart disease, rheumatic fever (k) Arterial and venous occlusions (l) Intestinal ischaemia (m) Thoracic dissection (n) Intra-abdominal aneurysms (o) Aortic aneurysms, aortic dissection (p) Mycotic aneurysms (q) Intra-arterial drug injection (r) Acute coronary syndromes 1.2 Pathophysiology of arrhythmia, including: (a) Bradycardias, including sinus bradycardia, heart block (b) Tachycardias, including narrow complex regular, narrow complex irregular, wide complex regular, wide complex irregular, torsade des pointes, ventricular fibrillation (c) Ectopy, narrow and wide complex 1.3 Accessory pathways, including Wolff-Parkinson-White syndrome.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.4 Interpret symptoms and clinical signs of cardiovascular disorders. 1.5 Generate a diagnosis, provide initial targeted treatment, and plan further investigations for patients presenting with cardiovascular disorders.	SEP, SDL, ST	WBA, ITA, FEx

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS2	**Demonstrate knowledge and understanding of:**		
	2.1 Aetiology and pathophysiology of acute coronary syndromes, including: (a) Right ventricular myocardial infarction (b) Thrombolysis myocardial infarction (c) Left ventricular failure and cardiogenic shock in the setting of myocardial infarction (d) ST elevation in the absence of myocardial infarction	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.2 Generate a differential diagnosis, plan of management and disposition for patients with syncope.	SEP, SDL, ST	WBA, ITA, FEx
TS3	**Demonstrate knowledge and understanding of:**		
	3.1 Prehospital management of acute coronary syndromes. Describe pros and cons of acute coronary syndrome pathways. 3.2 ANZCOR guidelines for the management of arrhythmias. 3.3 Implantable cardiac devices, including pacemakers and defibrillators, temporary pacing wires, and associated complications of their use. 3.4 Principles of external and internal emergent cardiac pacing including indications, contraindications and management of complications. 3.5 Principles of cardiac transplantation, including complications of transplants and increased risk of infection due to immunosuppression.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	3.6 Interpret a complex ECG in the setting of acute coronary syndromes. 3.7 Interpret relevant investigations as per the investigations list. 3.8 Perform procedures for the management of respiratory presentations, including: 3.9 External emergent cardiac pacing.	SEP, SDL, ST	WBA, ITA, FEx

3.2 Respiratory Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of respiratory presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Aetiology and pathophysiology of, including: (a) Respiratory failure (b) Upper airway obstruction (c) Infectious diseases, including croup, bronchitis, pneumonia, empyema (d) Aspiration (e) Acute lung injury, respiratory distress syndrome (f) Asthma (g) Pneumothorax (h) Pneumomediastinum (i) Chronic obstructive pulmonary disease (j) Pleural effusions (k) Haemoptysis (l) Cavitating lung lesions (m) Isolated 'coin' lesions on chestw x-ray (n) Disorders of the chest wall (o) Disorders of the mediastinum, including mediastinitis, mediastinal masses (p) Sleep apnoea (q) Neoplastic disorders (r) Congenital disorders, including bronchopulmonary dysplasia, cystic fibrosis	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.2 Take a history and perform a targeted examination of a patient with a suspected respiratory illness. 1.3 Interpret symptoms and clinical signs of respiratory illness. 1.4 Generate a differential diagnosis, plan of management and disposition for patients with respiratory illness. 1.5 Perform intercostal catheter insertion	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Respiratory effects of obesity.	SEP, SDL, ST	FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Principles of lung transplantation, including complications of transplants and increased risk of infection due to immunosuppression.	SEP, SDL, ST	FEx
	Be able to:		
	3.2 Perform needle thoracocentesis for aspiration of pleural fluid.	SEP, SDL, ST	WBA, ITA, FEx

3.3 Gastrointestinal Presentations

Demonstrate knowledge and understanding of gastrointestinal presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Aetiology and pathophysiology of gastrointestinal bleeding, including: (a) Oesophageal varices (b) Peptic ulceration (c) Angiodysplasia of the colon 1.2 Pharmacological agents used in the management of gastrointestinal bleeding. 1.3 Aetiology and pathophysiology of oesophageal disorders, including: (a) Infectious disorders (b) Oesophagitis (c) Gastroesophageal reflux (d) Neoplastic disorders 1.4 Aetiology and pathophysiology of problems of the bowel, including: (a) Inflammatory bowel disease (b) Irritable bowel syndrome (c) Infectious disorders and gastroenteritis (d) Bowel obstruction, including: (e) Post-surgical adhesions (f) Malrotation (g) Volvulus (h) Congenital pyloric stenosis (i) Intussusception (j) Diverticular disease (k) Meckel's diverticulum (l) Acute appendicitis (m) Ischaemic colitis (n) Constipation 1.5 Aetiology and pathophysiology of other abdominal presentations, including: (a) Peritoneal adhesions (b) Hernias (c) Tumours 1.6 Aetiology and pathophysiology of gastritis and gastroenteritis. 1.7 Aetiology and pathophysiology of the hepatobiliary system and pancreatic disorders including: (a) Hepatic failure (b) Hepatitis (c) Infectious disorders of the liver (d) Alcoholic liver disease (e) Hepato-renal syndrome (f) Portal hypertension (g) Cholelithiasis, cholecystitis, cholangitis (h) Pancreatitis	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1 continued	***Be able to:***		
	1.8 Take a history and perform a targeted examination of a patient with a suspected gastrointestinal illness. 1.9 Interpret symptoms and clinical signs of gastrointestinal Illness. 1.10 Interpret relevant investigations as per the investigations list. 1.11 Generate a differential diagnosis and plan of management for patients with gastrointestinal illness. 1.12 Perform insertion of a nasogastric tube.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Aetiology and pathophysiology of anorectal presentations, including: (a) Haemorrhoids (b) Perianal haematoma (c) Anal fissure (d) Anorectal abscesses (e) Pilonidal disease (f) Rectal bleeding (g) Rectal prolapse (h) Radiation proctitis (i) Rectal foreign bodies 2.2 Aetiology and pathophysiology of other abdominal presentations, including: (a) Peritonitis (b) Retroperitoneal haematoma (c) Intraabdominal/retroperitoneal abscesses	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Indications for urgent gastroscopy. 3.2 Techniques used with gastroscopy to control haemorrhage, including balloon tamponade of gastro-oesophageal varices. 3.3 Aetiology and pathophysiology of other abdominal presentations, including: (a) Motor abnormalities (b) Mallory-Weiss syndrome (c) Stricture and stenosis (d) Tracheo-oesophageal fistula	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	3.4 Perform procedures for the management of gastrointestinal presentations, including: (a) Abdominal paracentesis (b) Incision and drainage of thrombosed external haemorrhoid	SEP, SDL, ST	WBA, ITA, FEx

3.4 Neurological Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of neurological presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Aetiology and pathophysiology of neurological diseases caused by infectious agents. 1.2 Function of stroke units, their use, and effects on patient flow in emergency departments. 1.3 Aetiology and pathophysiology of cerebrovascular accidents (CVA). 1.4 Aetiology and pathophysiology of seizures and status epilepticus.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.5 Take a history and perform a targeted examination of a patient with a suspected neurological illness. 1.6 Take a history and perform a targeted examination of a patient with ataxia and gait disturbances. 1.7 Interpret symptoms and clinical signs of neurological illness. 1.8 Interpret relevant investigations as per the investigations list.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Aetiology and pathophysiology of altered mental state, including delirium and coma. 2.2 Aetiology and pathophysiology of headache and facial pain.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.3 Perform lumbar puncture and measure CSF opening pressure.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Aetiology and pathophysiology of altered mental state, including: (a) Dementia (b) Memory disorders 3.2 Aetiology and pathophysiology of: (a) Guillain-Barré syndrome (b) Multiple sclerosis (c) Myasthenia gravis and Eaton-Lambert syndrome (d) Motor neurone disease (e) Peripheral neuropathy (f) Peripheral nerve lesions (g) Brachial plexus syndrome (h) Myopathy (i) Periodic paralysis (j) Parkinson's disease (k) Hydrocephalus (l) Disorders of the spinal cord (m) Paraneoplastic disorders of the CNS and PNS	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3 continued	3.3 Aetiology and pathophysiology of cranial nerve disorders. 3.4 Aetiology and pathophysiology of spinal cord injury, including medical problems in the spinally injured patient 3.5 Aetiology and pathophysiology of neurosurgical presentations, including: (a) Intracranial aneurysms (b) AV malformations (c) Subarachnoid haemorrhage (d) Cerebral tumours (e) Shunt complications (f) Elevated intracranial pressure (g) Intervertebral disc disease (h) Spinal stenosis including cauda equina syndrome	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	3.6 Manage dystonic reactions. 3.7 Generate a differential diagnosis, plan of management and disposition for patients with neurological illness.	SEP, SDL, ST	WBA, ITA, FEx

3.5 Ophthalmological Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of ophthalmological presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Take a history and perform a targeted examination of a patient with a disorder of the eye, including the red eye, painful eye and sudden visual loss. 1.2 Perform direct ophthalmoscopy. 1.3 Perform eye irrigation.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Aetiology and pathophysiology of eye presentations, including: (a) Blepharitis, dacryocystitis, conjunctivitis (b) Corneal abrasions, corneal ulcers, keratitis (c) Foreign bodies: conjunctival, corneal (d) Spontaneous subconjunctival haemorrhage (e) Amblyopia (f) Herpes simplex, herpes zoster (g) Ocular burns: caustic, flash, thermal (h) Glaucoma, uveitis (i) Retrobulbar haemorrhage (j) Orbital, pre-orbital cellulitis, endophthalmitis (k) Blunt and penetrating ocular trauma (l) Giant cell arteritis	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.2 Measure intraocular pressure. 2.3 Use fluorescence in removal of corneal foreign body. 2.4 Perform a slit lamp examination. 2.5 Apply an eye pad or shield.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Principles of performing a lateral canthotomy.	SEP, SDL, ST	FEx
	Be able to:		
	3.2 Generate a differential diagnosis and plan of management for patients with eye disorders, including: (a) Uveitis (b) Retinal detachment, vitreous and retina haemorrhages, retinal vascular occlusions, optic neuritis	SEP, SDL, ST	WBA, ITA, FEx
	3.3 Interpret symptoms and clinical signs of eye disorders. 3.4 Interpret relevant investigations as per the investigations list.		
TS4	***Be able to:***		
	4.1 Perform a lateral canthotomy.	SEP, SDL, ST	ITA, FEx

3.6 Otolaryngologic Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of ear, nose and throat presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Aetiology and pathophysiology of ear presentations, including: (a) Otalgia (b) Otitis media, otitis externa (c) Cholesteatoma (d) Perforated tympanic membrane (e) Sudden sensorineural hearing loss (f) Chondritis/perichondritis (g) Mastoiditis (h) Labyrinthitis, vestibular neuronitis (i) Meniere's disease (j) Benign paroxysmal positional vertigo	SEP, SDL, ST	WBA, ITA, FEx
	1.2 Aetiology and pathophysiology of epistaxis and sinusitis.		
	1.3 Aetiology and pathophysiology of throat and oropharynx presentations, including: (a) Acute infections (b) Supraglottitis, epiglottitis (c) Abscesses (d) Post-tonsillectomy bleed		
	1.4 Role and use of following equipment in the assessment of otolaryngologic and ophthalmologic presentations: (a) Otoscope (b) Pneumatic endoscope		
	Be able to:		
	1.5 Take a history and perform a targeted examination of a patient with a suspected disorder of the ear, nose or throat, including the use of otoscope and insertion of nasal speculum.		
	1.6 Interpret symptoms and clinical signs of ear, nose and throat illness, with consideration for public health implications and different management strategies in specific populations, such as Aboriginal, Torres Strait Islander, Māori and Pasifika patients.	SEP, SDL, ST	WBA, ITA, FEx
	1.7 Generate a differential diagnosis, treatment plan and disposition for patients with simple ear, nose and throat illness.		
TS2	***Be able to:***		

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
	2.1 Perform aural toilet. 2.2 Insert an ear wick. 2.3 Collect a nasopharyngeal specimen to test for infection. 2.4 Remove foreign bodies from the nose, ear, upper airway and pharynx. 2.5 Perform Epley's manoeuvre. 2.6 Manage epistaxis using anterior packing, cautery, posterior packing and balloon placement, as appropriate.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Indications, contraindications and complications of drainage of a peritonsillar abscess.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	3.2 Generate a differential diagnosis, treatment plan and disposition for patients with complex ear, nose and throat illness.	SEP, SDL, ST	WBA, ITA, FEx

3.7 Acute Psychiatric and Addiction Related Presentations

By the end of the relevant stage of training, demonstrate knowledge of principles of acute psychiatric and behaviourally disturbed patients and application of understanding to practice in emergency medicine. Furthermore, demonstrate knowledge of the impact of historical and current social and cultural inequities on the mental health of specific populations, and apply this understanding to the provision of socially and culturally safe emergency medicine care.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Principles of assessment and management of psychiatric presentations in the ED, including: (a) Triage, initial assessment and de-escalation (b) Appropriate psychiatric assessment area (c) Role of hospital and community based mental health clinicians and services 1.2 Acute mental health services available in the ED. 1.3 Use of regional mental health legislation relevant to emergency medicine practice. 1.4 Impact of historical and socio-economic factors, including the effects of colonisation, that increase the risk of addiction and involvement with the mental health and justice system.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.5 Undertake a mental state examination and risk assessment for the following, and communicate findings to the team: (a) Self-harm (b) Suicide (c) Violence (d) Unsafe discharge from ED against medical advice 1.6 Undertake an assessment of cognitive function.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Psychiatric presentations in the ED, including: (a) Deliberate self-harm (b) Depression (c) Anxiety disorders (d) Psychoses (e) Personality disorder (f) Pain disorder (g) Somatisation disorder (h) Munchausen's by proxy 2.2 Principles of management of a behaviourally disturbed patient, including methods of physical and chemical restraint. 2.3 Minimum standards of monitoring sedated behaviourally disturbed patients. 2.4 The influence of organic brain syndromes on acute psychiatric illness presentations, treatment, and disposition. 2.5 Issues surrounding alcohol and/or drug use in the workplace as they relate to workplace occupational health and safety legislation.	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS2 continued	***Be able to:***		
	2.6 Generate a differential diagnosis and plan of management for patients with acute psychiatric and behavioural illness. 2.7 Verbally de-escalate the culturally diverse patient in a culturally safe manner. 2.8 Safely sedate the acute behaviourally disturbed patient and initiate appropriate monitoring. 2.9 Recognise patients who would benefit from cultural support, including the needs of Aboriginal and Torres Strait Islander peoples and Māori, and refer to appropriate services. 2.10 Identify and coordinate the management of comorbid medical and psychiatric conditions, including: (a) Substance misuse (b) Self-harm and suicide risk (c) Depression and anxiety (d) Delirium/dementia 2.11 Appropriately apply physical restraint to the behaviourally disturbed patient. 2.12 Ensure medical investigations are undertaken before patients are transferred to inpatient psychiatric unit to reduce risk of adverse outcomes for patients with mental health presentations. 2.13 Facilitate early intervention for psychosis from the ED to pre-empt crisis presentations. 2.14 Identify risks of transporting a behaviourally disturbed patient and strategies to mitigate these. 2.15 Apply processes related to involuntary treatment as per the mental health act in the relevant jurisdiction 2.16 Integrate available mental health services. 2.17 Apply the relevant regional mental health legislation, as appropriate.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Lead a team to provide acute treatment for a behaviourally disturbed patient. 3.2 Diagnose, manage and determine risks from acute withdrawal, intoxication and dependence. 3.3 Appropriately package the behaviourally disturbed patient for urgent transport.	SEP, SDL, ST	WBA, ITA, FEx

3.8 Toxicological and Environmental Emergency Presentations

By the end of the relevant stage of training, demonstrate knowledge of principles of toxicology, toxinology and environmental presentations and application of understanding to practice in emergency medicine.

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Aetiology and pathophysiology of poisoning, drug overdose and envenomation. 1.2 Aetiology and pathophysiology of hyperthermia and hypothermia 1.3 Aetiology and pathophysiology of diving-related illness 1.4 Principles of assessment of toxicological presentations in the ED, including: (a) Triage and initial assessment (b) General approach to assessment (c) Risk assessment (d) History (dose, drug, timing, symptoms, patient factors) (e) Examination (f) Investigations (ECG: sodium channel blockade, QT prolongation) (g) Role of toxicologists (h) Common presentations (e.g. paracetamol, quetiapine, SSRI) 1.5 Principles of assessment of environmental presentations in the ED, including: (a) Triage and initial assessment (b) General approach to assessment (c) Risk assessment (d) History (e) Examination (f) Investigations 1.6 Principles of management of toxicological presentations including: (a) Prehospital care (b) General approach to management (c) Indications for decontamination (d) Indications for enhanced elimination (e) Indications for antidotes 1.7 Principles of management of environmental presentations including: 1.8 Prehospital care 1.9 General approach to management 1.10 Indications for passive or active warming 1.11 Indications for rapid cooling 1.12 Indications for decompression 1.13 Role of poison centres in the management and prevention of poisoning. 1.14 Principles of chemical dependency and substance abuse, including drug tolerance and drug withdrawal.	SEP, SDL, ST	PEx(W) PEx (VIVA) WBA, ITA, FEx

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1 continued	***Be able to:***		
	1.15 Take a history, perform a targeted examination and risk assessment of a poisoned patient, including agent, dose, time of ingestion, clinical features and patient factors. 1.16 Interpret symptoms and clinical signs of poisoning. 1.17 Identify the underlying cause of the presentation, including distinguishing toxidromes for poisoning, drug overdose and envenomation. 1.18 Safely and appropriately apply pressure immobilization bandage, including use of splinting.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Medicolegal considerations in the assessment and management of toxicological presentations, including: (a) Use of restraints, physical and chemical (b) Transport of the patient under a section or treatment order (c) Paediatric patients (d) Management of patient escorts 2.2 Psychiatric and social aspects of overdose. 2.3 Principles of assessment and management of toxicological presentations in the ED, including: (a) Paediatric patients presenting with suspected ingestion of toxic substances or items, including batteries (b) Drugs of abuse (stimulants, opioids, sedatives [eg GHB, benzodiazepines]) and withdrawal	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.4 Identify the appropriate antidote or antivenom. 2.5 Identify patients requiring decontamination. 2.6 Identify patients requiring hyperbaric treatment of diving related illnesses including decompression sickness 2.7 Identify patients requiring warming or cooling, and initiate basic warming and cooling techniques, including external methods and administration of IV fluids. 2.8 Provide appropriate treatment for a toxicological presentation.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Principles of assessment and management of toxicological presentations in the ED, including: (a) Life threatening presentations (e.g., calcium channel blockers, beta blockers, TCA, toxic alcohols) (b) Envenomation (snake, spider, marine) (c) Poisonous fungi and plants (ingestion, exposure) 3.2 Principles of industrial toxicology, including presentations associated with exposure to and/or ingestion of: (a) Toxic metals and metal fumes (b) Toxic gases (c) Toxic liquids (d) Pesticides, herbicides and rodenticides	SEP, SDL, ST	WBA, ITA, FEx

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3 continued	3.3 Aetiology and pathophysiology of exposure syndromes of chemical, biological and radiological agents, with specific regard to: (a) Dose-response relationships and factors affecting toxicity (b) Latency 3.4 Sources of toxin and chemical, biological and radiological agent advice.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	3.5 Lead a team to resuscitate a patient with: (a) Toxicological presentation (b) Hypothermia or hyperthermia, using advanced warming and cooling techniques. (c) Decompression illness 3.6 Initiate specific decontamination measures, including gastric decontamination and whole bowel irrigation. 3.7 Appropriately package the patient for transport as required.	SEP, SDL, ST	WBA, ITA, FEx

3.9 Endocrinological Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of endocrinological presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Aetiology and pathophysiology of the endocrine system, including: (a) Disorders of glucose metabolism (b) Alcoholic ketoacidosis (c) Adrenal disorders (d) Thyroid disorders (e) Pituitary disorders	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
	Be able to:		
	1.2 Take a history and perform a targeted examination of a patient with a suspected endocrine disorder. 1.3 Interpret symptoms and clinical signs of endocrine disorders 1.4 Interpret relevant investigations as per the investigations list.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Generate a differential diagnosis, plan of management and disposition for patients with endocrine disorders	SEP, SDL, ST	WBA, ITA, FEx

3.10 Haematological Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of haematological presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.5 Aetiology and pathophysiology of the haematological system, including: (a) Anaemia (b) Abnormal haemoglobins (c) Disorders of haemostasis and coagulation (d) Neutropenia (e) Platelet disorders (f) Haematological malignancy	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
	Be able to:		
	1.6 Take a history and perform a targeted examination of a patient with a suspected disorder of the haematological system. 1.7 Interpret symptoms and clinical signs of haematological disorders. 1.8 Interpret relevant investigations as per the investigations list. 1.9 Generate a differential diagnosis, plan of management and disposition for patients with haematological disorders.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Indications, contraindications, adverse reactions, consent and ethical use of blood transfusions and component therapy.	SEP, SDL, ST, eLM	WBA, ITA, FEx

3.11 Oncological Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of oncological presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Malignancies specific to organ systems.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
	Be able to:		
	1.2 Take a history and perform a targeted examination of a patient with a suspected malignancy. 1.3 Interpret symptoms and clinical signs of malignancy. 1.4 Interpret relevant investigations as per the investigations list. 1.5 Generate a differential diagnosis, plan of management and disposition for patients with a suspected malignancy.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Culturally diverse beliefs surrounding health, illness and dying, with respect to culturally specific treatments and wishes to decline treatment specific to patients with oncological presentations. 3.2 Culturally diverse expectations for the role of family/whānau in discussions about treatment and outcomes. 3.3 Acute complications related to local tumour involvement, including: (a) Acute spinal cord compression (b) Upper airway obstruction (c) Malignant pericardial effusion (d) Superior vena cava syndrome (e) Pancoast's syndrome (f) Hyperviscosity syndrome 3.4 Implications related to myelosuppression, including: (a) Febrile neutropenia (b) Immunosuppression and opportunistic infections (c) Thrombocytopaenia and haemorrhage 3.5 Principles of paraneoplastic syndromes, including: (a) Undiagnosed malignancy (b) Hypercalcaemia and syndrome of inappropriate antidiuretic hormone secretion (SIADH) in patients with known malignancy	SEP, SDL, ST	WBA, ITA, FEx

3.12 Renal and Urogenital Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of renal and urogenital presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Aetiology and pathophysiology of renal presentations, including: (a) Pyuria (b) Infectious disorders (c) Acute renal failure (d) Chronic renal failure (e) Hyperkalaemia in renal failure (f) Complications of renal dialysis (g) Haemolytic uremic syndrome (h) Rhabdomyolysis (i) Polycystic kidney disease 1.2 Aetiology and pathophysiology of urogenital presentations, including: (a) Urinary tract infection (b) Cystitis (c) Urethritis (d) Ureteric calculi (e) Urinary retention (f) Obstructive uropathy (g) Vesico-ureteric reflux (h) Haematuria (i) Tumours 1.3 Disorders of the male reproductive tract, including: (a) Acute scrotum (b) Prostatitis (c) Prostatic hypertrophy (d) Phimosis/paraphimosis/balanitis (e) Priapism	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
	Be able to:		
	1.4 Take a history and perform a targeted examination of a patient with a suspected disorder of the renal or genitourinary system. 1.5 Interpret symptoms and clinical signs of renal and genitourinary disorders. 1.6 Interpret relevant investigations as per the investigations list. including urine dipstick results, urine microscopy and culture. 1.7 Generate a differential diagnosis, plan of management and disposition for patients with a suspected disorder of the renal or genitourinary system. 1.8 Perform procedures for the management of renal and urogenital presentations, including insertion of urethral catheter.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Principles of renal transplantation, including complications of transplants and increased risk of infection due to immunosuppression.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Demonstrate knowledge and understanding of:***		
	3.2 Complex procedures for the management of renal and urogenital presentations, such as the insertion of suprapubic catheters.	SEP, SDL, ST	WBA, ITA, FEx

3.13 Rheumatological Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of rheumatological presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Aetiology and pathophysiology of disorders of the rheumatological system, including: (a) Arthropathies – crystal, inflammatory and degenerative (b) Joint infections (c) Systemic complications of rheumatological disease and its treatment	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
	Be able to:		
	1.2 Take a history and perform a targeted examination of a patient with a suspected rheumatological illness.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Indications, contraindications and complications of arthrocentesis and associated therapies.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.2 Interpret symptoms and clinical signs of rheumatological illness. 2.3 Interpret relevant investigations as per the investigations list. 2.4 Generate a differential diagnosis, plan of management and disposition for patients with rheumatological illness. 2.5 Perform knee arthrocentesis.	SEP, SDL, ST	WBA, ITA, FEx

3.14 Dermatological Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of dermatological presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Take a history and perform a targeted examination of a patient with a dermatological illness.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Aetiology and pathophysiology of disorders of the dermatological system, including: (a) Life threatening presentations: toxic epidermal necrolysis, Stevens-Johnson Syndrome/Erythema multiforme major, Meningococcal infection, Staph Scaled Skin Syndrome (b) Infectious disorders: herpes, viral exanthemas, scabies, cellulitis, erysipelas, impetigo, fungal (c) Atopic eczema and psoriasis (d) Allergic reactions: urticaria, contact dermatitis	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
	Be able to:		
	2.2 Describe a rash, lump, lesion or ulcer of the skin. 2.3 Generate a differential diagnosis and plan of management for patients with dermatological illness.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Interpret symptoms and clinical signs of dermatological illness including diagnosis of life-threatening diseases characterised by rashes.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx

3.15 Infectious Disorders

By the end of the relevant stage of training, demonstrate knowledge and understanding of infectious presentations and apply this to the management of patients with these presentations in the emergency department.

Training Style	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Aetiology and pathophysiology of infectious diseases, including: (a) Antibiotic use in the ED (b) Systemic inflammatory response syndrome (c) Sepsis, septic shock (d) Multiple organ dysfunction (e) Toxic shock syndrome (f) Infections in the returned traveller, including: (g) Malaria (h) Dengue fever (i) Haemorrhagic fevers (j) Typhoid (k) Zika virus (l) Viral infections, including: (m) HIV (n) Infectious mononucleosis (o) Influenza/parainfluenza (p) Herpes simplex (q) Herpes zoster (r) Rheumatic fever, including: 1.2 Complications and long-term sequelae prevalence in at-risk populations (a) Antibiotic prophylaxis for sore throat (b) Treatment protocols for high-risk groups (c) Mycoplasma infections (d) Fungal infections (e) Protozoal infections (f) Tick-borne infections 1.3 Contact management of patients with serious infectious disease, including requirements for isolation of patients. 1.4 Principles of infection control in the ED. 1.5 Standard precautions in the ED for protection of staff from infectious disease. 1.6 Standard protocols for the management of suspected exposure of staff to infectious disease. 1.7 Principles of management of infectious disease outbreaks, including surveillance protocols. 1.8 Reportable communicable diseases and protocols for reporting.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
	Be able to:		
	1.9 Take a history and perform a targeted examination of a patient with a suspected infectious disease.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx

Training Style	Learning outcomes	Teaching & Learning Strategies	Assessment
TS2	***Demonstrate knowledge and understanding:***		
	2.1 Aetiology and pathophysiology of fever in the infant patient with bacteraemia. 2.2 Aetiology and pathophysiology of: (a) Bacterial infections, including: i) Food poisoning ii) Meningococcaemia iii) Disseminated gonococcal infection iv) Tuberculosis and other mycobacterial infections v) Gas gangrene vi) Necrotising fasciitis vii) Fournier's gangrene viii) Diphtheria ix) Haemophilus influenzae (b) Sexually transmitted infections (c) Infection from marine source (d) Secondary bacterial infections in the burns patient	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.3 Interpret symptoms and clinical signs of infectious disease. 2.4 Interpret relevant investigations as per the investigations list. 2.5 Generate a differential diagnosis, plan of treatment and disposition for patients with suspected infectious disease.	SEP, SDL, ST	WBA, ITA, FEx

3.16 Immunological Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of immunological presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Aetiology and pathophysiology of hypersensitivity, including allergic and anaphylactoid reactions, anaphylaxis, angioedema, and drug allergies.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
	Be able to:		
	1.2 Take a history and perform a targeted examination of a patient with a suspected immunological disorder. 1.3 Treat simple allergy presentations not requiring resuscitation.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Clinical presentation of immunological disorders, including: (a) Hypersensitivity, including: (b) Allergic reactions, anaphylactoid reactions, anaphylaxis, angioedema and drug allergies (c) Collagen vascular disease (d) Raynaud's syndrome (e) Reactive arthritis (f) Scleroderma (g) Systemic lupus erythematosus (h) Vasculitis, including Polyarteritis nodosa and granulomatosis with polyangiitis (i) Kawasaki's disease (j) Sarcoidosis 2.2 Management of allergy presentations successfully responsive to adrenaline, including the use of epinephrine autoinjectors, allergy action plans, and referral to allergist for severe reactions, as pertain to international guidelines on the management of severe reactions. 2.3 Complications of immunosuppressant agents. 2.4 Needs of patients with primary and secondary immunodeficiency presenting with infection. 2.5 Application and timing of tryptase levels for anaphylaxis or acute reaction to a specific substance.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.6 Interpret symptoms and clinical signs of immunological disorders. 2.7 Recognise severe manifestations of autoimmune diseases and vasculitides. 2.8 Generate a differential diagnosis and plan of management for patients with immunological disorders.	SEP, SDL, ST	WBA, ITA, FEx

3.17 Obstetric and Gynaecological Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of obstetric and gynaecological presentations and apply this to the management of women with these problems presenting to the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Principles of normal pregnancy, including antenatal screening, physiological changes in the mother, and normal foetal development.		
	2.2 Pathophysiology, and principles of diagnosis and management of gynaecological presentations, including: (a) Retained foreign bodies (b) Bartholin's cyst/abscess (c) Vulvar-vaginal infections including sexually transmitted diseases (d) Endometriosis and other causes of pelvic pain (e) Emergency contraception (f) Complications related to contraception (g) Ovarian pathology (torsion, cysts, tumours) (h) Dysfunctional uterine bleeding	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.3 Take a history and perform a targeted examination of an obstetric patient, including an examination of the gravid abdomen.		
	2.4 Take a history and perform a targeted examination of a patient with a suspected gynaecological disorder, including bimanual and speculum examination and genital tract specimen collection.		
	2.5 Interpret symptoms and clinical signs of obstetric and gynaecological disorders.	SEP, SDL, ST	WBA, ITA, FEx
	2.6 Generate a differential diagnosis, plan of management and disposition for patients with gynaecological disorders.		
	2.7 Be culturally safe when managing collection or disposal of body products.		
TS3	***Demonstrate knowledge and understanding of:***		

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
	3.1 Factors that make pregnancy high risk, including multiple pregnancy, pre-existing conditions in the mother, pregnancy-induced conditions, and abnormalities of foetal development. 3.2 Complications of pregnancy, including: (a) Hyperemesis gravidarum (b) Miscarriage (c) Septic abortion (d) Ectopic pregnancy (e) HELLP syndrome (f) First trimester bleeding (g) Antenatal haemorrhage, including placental abruption, placenta praevia, vasa praevia (h) Infections, including urinary tract infections (i) Isoimmunisation (j) Pregnancy-induced hypertension and pre-eclampsia	SEP, SDL, ST	WBA, ITA, FEx
TS3 continued	3.3 Complications of labour and delivery, and principles of their management, including: (a) Causes of Premature labour (b) Retained placenta (c) Primary and secondary postpartum haemorrhage (d) Endometritis (e) Retained products of conception 3.4 Effects of pharmacological agents and drugs in pregnancy.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	3.5 Recognise deviation from normal maternal and foetal assessment, including the use of foetal doppler. 3.6 Generate a differential diagnosis and plan of management for obstetric patients. 3.7 Perform procedures for the management of obstetric presentations, including: 3.8 Removal of products of conception from cervical os. 3.9 CPR on a pregnant woman and postpartum woman. 3.10 Manage normal labour and delivery.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx

3.18 Metabolic Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of metabolic presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Volumes and composition of total body water, intracellular fluid, extracellular fluid, plasma and blood. 1.2 Aetiology and pathophysiology of disorders of abnormal serum, including potassium, sodium, calcium, magnesium and chloride. 1.3 Principles of arterial and venous blood gas analysis, including alveolar gas equation and A-a gradient. 1.4 Aetiology and pathophysiology of acid-base disorders, including: (a) Metabolic acidosis (b) Metabolic alkalosis (c) Respiratory acidosis (d) Respiratory alkalosis	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
	Be able to:		
	1.5 Take a history and perform a targeted examination of a patient with a suspected metabolic disorder. 1.6 Interpret symptoms and clinical signs of metabolic illness. 1.7 Undertake clinical examination of the patient with a metabolic disorder.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Investigations to determine anion and osmolar gaps, and the use of these in diagnosis and management of patients. 2.2 Indications, contraindications and side effects of sodium bicarbonate administration.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.3 Generate a differential diagnosis, plan of management and disposition for patients with suspected metabolic disorders.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Interpret relevant investigations as per the investigations list including: (a) electrocardiograph in electrolyte disturbance. (b) arterial and venous blood gases. TS1 and TS3 for advanced analysis	SEP, SDL, ST	WBA, ITA, FEx

3.19 Orthopaedic Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of orthopaedic presentations and apply this to the management of patients with these presentations in the emergency department.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Principles of fractures and their assessment, including: (a) Clavicle, scapula (b) Proximal humerus, elbow, forearm, wrist, carpal bones (c) Spine (d) Pelvis, hip (e) Femur, including femoral shaft, supracondylar, condylar and patella fractures (f) Tibia, fibula, angle and foot 1.2 Principles of dislocations and their assessment, including: (a) Shoulder, acromioclavicular joint (b) Elbow, including pulled elbow (c) Carpal-metacarpal, phalanges (d) Cervical spine, including atlantoaxial, facet joint (e) Hip (f) Knee, patella (g) Ankle, foot, tarsal, metatarsal, phalangeal 1.3 Principles of soft tissue injuries, assessment and management, including: (a) Shoulder: rotator cuff tears, bursitis, tendinitis (b) Elbow: bursitis, tendinitis (c) Knee: bursitis, ligament injury, cruciate injury, meniscal injury, Bakers cyst (d) Ankle, foot: ligament, tendon injury 1.4 Principles of hand injuries and their assessment, including: (a) Lacerations (b) Nail injuries (c) Extensor and flexor tendon injuries (d) Mallet finger (e) Boutonniere deformity (f) Infections: paronychia, infective tenosynovitis (g) Foreign bodies (h) Amputations (i) Nerve injuries (j) High pressure injection injuries (k) Crush injury 1.5 Principles of other orthopaedic presentations, including osteomyelitis, and septic arthritis.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1 continued	***Be able to:***		
	1.6 Take a history and perform a targeted and culturally safe examination of a patient with a suspected orthopaedic disorder or injury, including neurological, vascular and joint assessment. 1.7 Interpret symptoms and clinical signs of orthopaedic disorders and injuries. 1.8 Interpret radiological assessment of injured limbs. 1.9 Independently perform: (a) Limb splinting, including the use of femoral and tibial traction devices, collar and cuff, broad arm slings (b) Joint reduction of digits	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Principles of management in the ED of fractures, dislocations and soft tissue injuries.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.2 Generate a differential diagnosis and plan of management for patients with orthopaedic disorders and injuries. 2.3 Perform procedures for the management of orthopaedic presentations, including: (a) Application of plaster splints/casts on limbs (b) Drainage of paronychia (c) Drainage of subungual haematoma (d) Splintage and immobilisation techniques, including application of: (e) Broad arm sling (f) Collar and cuff (g) Knee immobiliser/splint (h) Femoral splints (i) Ankle splints and controlled action motion walking boots (j) Pelvic stabilisation techniques 2.4 Perform the following procedures on trauma patients: (a) Major joint reduction (b) Emergent fracture reduction in an impending compromised limb	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Principles of other orthopaedic presentations, including: (a) Overuse syndromes (b) Complex regional pain syndrome type 1 (Sudeck's atrophy)	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3 continued	3.2 Paediatric considerations in orthopaedics, including: (a) Salter-Harris classification (b) Injuries about the elbow (c) Child with a limp (d) Bone dysplasia (e) Connective tissue syndrome (f) Inflammatory arthritis (g) Metabolic bone abnormalities (h) Osgood/Schlatter disease (i) Perthes' disease (j) Slipped capital femoral epiphysis (k) Transient synovitis (l) Developmental hip dislocation	SEP, SDL, ST	WBA, ITA, FEx

3.20 Trauma

By the end of the relevant stage of training, demonstrate a contemporary evidence-based knowledge and understanding of trauma and apply this knowledge to the management of trauma patients.

Reference should also be made to 4.1.2.3 Resuscitation Medicine, 4.1.3.5 Ophthalmological Presentations, 4.1.3.8 Toxicological and Environmental Presentations and 4.1.3.19 Orthopaedic Presentations.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Mechanisms of injury. 1.2 Principles of trauma management, including: (a) Classification and description of fractures, dislocations, sprains and strains (b) Fracture, wound and burn healing (c) Pathophysiology of hypovolaemic shock 1.3 Epidemiology of trauma, including: (a) Trimodal peak of mortality (b) Relationships between injury mechanisms, patterns and prognosis, particularly blunt and penetrating trauma	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
	Be able to:		
	1.4 Identify the trauma patient who requires initiation of resuscitation. 1.5 Complete a primary trauma survey in an injured non-complex adult patient, incorporating point of care testing as required, and identify life-threatening abnormalities requiring emergent intervention. 1.6 Complete a culturally safe secondary trauma survey who no longer requires ongoing resuscitation or critical care interventions. 1.7 Perform a comprehensive culturally safe limb examination, including neurological, vascular and joint assessment. 1.8 Apply concepts of healing by primary and secondary intention to the creation of treatment plans for non-complex open wounds. 1.9 Identify and manage the following in trauma patients: (a) Scalp and other laceration (b) Removal of superficial and subcutaneous foreign bodies (c) Minor head injury, including post-concussive syndrome (d) Sprains and strains of joints (e) Burns not requiring immediate transfer to a Burns Unit 1.10 Perform relevant simple initial treatment procedures, including: (a) Spinal protection and clearance (b) Pelvic binding/splinting (c) Intravenous or intraosseous access (d) Supportive management of orthopaedic injuries (e) Basic skin suturing techniques and alternate skin closure, including tissue adhesives and staples 1.11 Prescribe appropriate analgesia for a patient, including the use of physical therapy. 1.12 Create a discharge and follow-up plan for a patient from the ED, incorporating likely health progression from injury.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Principles of trauma, including: (a) Trauma resuscitation (b) Trauma coagulopathy 2.2 Trauma systems, including: (a) Prehospital transport, communication and handover (b) Trauma centre designation and trauma triage (c) Interhospital transport (d) Trauma registry 2.3 Trauma scoring systems, epidemiology, incidence, and patterns of injury, including the following populations: (a) Paediatric patients (b) Geriatric patients (c) Patients on multiple medications (d) Obstetric patients (e) Bariatric patients (f) Vulnerable patients following assault (g) Patients with penetrating versus blunt trauma 2.4 Pathophysiology of clinical signs and symptoms due to breathing, circulatory, and neurological injury. 2.5 Principles of assessment of the trauma patient, including: (a) Trauma triage (b) Primary, secondary and tertiary survey (c) Severity of hypovolaemic shock (d) Systematic assessment of life threats (e) Systematic assessment of multitrauma (f) Roles and pitfalls of vital signs, such as heart rate, blood pressure, saturations, respiratory rates, non-invasive and core temperature, Glasgow Coma Scale, blood sugar, pupillary reflexes, neurovascular status of distal limbs (g) Point of care testing, such as x-ray, bedside ultrasound, blood gas, urinalysis, blood sugar (h) Rational investigation choice, including radiology, other medical imaging, lab tests including thromboelastometry (i) Culturally and psychologically safe and supported inclusion of family/whānau	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS2 continued	2.6 Principles of trauma management, including: (a) Multidisciplinary approach (b) Early management of severe trauma (c) Advanced trauma life support (d) Damage control resuscitation (e) Indications for conservative versus operative management (f) IV fluid choices and uses in trauma (g) Blood transfusion and component therapy, including massive transfusion, and cultural and religious differences surrounding receipt of blood products (h) Indications and preparation for intra- and inter-hospital transfer of the trauma patient (i) Trauma patient rehabilitation, including the risk of secondary psychiatric injury 2.7 Classification, description and principles of management of trauma presentations, including: (a) Head trauma (b) Maxillofacial trauma (c) Neck injuries (d) Vertebral column and spinal cord injuries (e) Chest trauma (f) Abdominal trauma (g) Major pelvic injury (h) Genitourinary trauma (i) Extremity trauma, including traumatic amputation, arterial injury, compartment syndromes and crush syndrome (j) Hypothermia and hyperthermia (k) Burns requiring admission, including: i) Inhalation injury ii) Chemical burns iii) Electrical burns iv) Tar burns v) Sunburn vi) Oral burns 2.8 Principles of fluid resuscitation in trauma. 2.9 Principles of blood product resuscitation in trauma, including massive transfusion protocols.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.10 Appraise and apply local clinical guidelines related to trauma management. 2.11 Perform the following procedures: (a) Wound exploration, cleaning, irrigation and debridement, (b) Incision and drainage of simple, superficial abscesses (c) Apply superficial wound dressings (d) Pack open wounds (e) Drainage of subungual haematomas	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS2 continued	2.12 Contribute to providing first line resuscitative treatment to a trauma patient, including a patient in cardiac or respiratory arrest. 2.13 Perform procedures that provide ongoing stability of the patient post-resuscitation and prior to admission. 2.14 Create a safe disposition plan for a trauma patient requiring admission. 2.15 Justify prioritisation of multiple tasks in a single trauma patient. 2.16 Justify prioritisation of multiple injuries based on injury severity, likelihood of consequences to patient, facilities available in the ED.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 The importance of public health advocacy in relation to trauma, including: (a) Role of public education, trauma prevention programs, and legislation as pertains to trauma occurrence (b) Local trauma epidemiology, including patterns of domestic violence and child abuse 3.2 Trauma scoring systems. 3.3 Pathophysiology of sequelae from inadequately treated or unidentified injuries and their complications. + Principles underpinning trauma teams, including: (a) Structure and role of trauma teams in the reception and management of severe trauma (b) Principles of Crisis Resource Management (c) Contributions of other medical disciplines in trauma management, such as pre-hospital and retrieval medicine, anaesthesia, surgery, intensive care medicine, radiology 3.4 Trauma team training. 3.5 Leadership in the management of trauma patients with varied severity in the hospital environment/network. 3.6 Pathophysiology of life-threatening injuries and their relationship to mechanism of injury. 3.7 Principles of common lifesaving procedures in the critically injured patient. 3.8 Pathophysiology of multisystem trauma. 3.9 Physiological effects of medications and fluids used in resuscitation of multitrauma patients. 3.10 Beyond the Resuscitation Room management of the severely injured trauma patient, including prioritising the order of interventional radiology, timing to operating theatre versus time to CT. 3.11 Complications of resuscitation in the trauma patient. 3.12 Production of false vital signs based on co-morbidities and patient's ongoing medication use.	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3 continued	3.13 Adaptations to principles of management of trauma in special cases, including the following: (a) Paediatric population, including non-accidental injury (b) Obstetric population, including obstetric complications of trauma and uterine rupture (c) Elderly trauma population (d) Bariatric patients (e) Multiple casualties/disaster (f) Patient(s) on multiple medications (g) Vulnerable patient(s) post-assault	SEP, SDL, ST	WBA, ITA, FEx
	3.14 Role of the Coroner in trauma patients.		
	3.15 Principles of balanced blood product resuscitation, including viscoelastic haemostatic testing guidance.		
	Be able to:		
	3.16 Resuscitate a critically injured patient with an expanded range of therapies beyond first line treatments, including haemostatic resuscitation.		
	3.17 Assess and resuscitate a high-complexity patient due to comorbid conditions, including: (a) Coagulopathy (b) Cardiorespiratory illness (c) Reduced physiological reserve, such as in patients with renal conditions, diabetes and elderly and paediatric patients		
	3.18 Diagnose multiple injuries.		
	3.19 Provide specialised emergency treatment to the following injuries: (a) Eye, ear, and maxillofacial injuries, including reduction of temporo-mandibular joint (b) Dental injuries, including stabilising an injured tooth and bleeding following dental extraction (c) Severe burns requiring transfer to Burns Unit (d) Penetrating wounds, including those into joints, thoracic cavity, and abdominal cavity (e) Solid intra-abdominal and intrathoracic organ injury (f) Moderate and severe head injury, (g) Traumatic limb injury necessitating amputation	SEP, SDL, ST	WBA, ITA, FEx
	3.20 Initiate treatment to prevent short term complications of injuries, including raising intracranial pressure and compartment syndromes.		
	3.21 Perform tertiary trauma survey assessment for patients in the Short Stay Unit of the ED.		
	3.22 Co-ordinate the discharge of the trauma patient.		
TS4	***Be able to:***		
	4.1 Create a resuscitation and treatment plan for a multitrauma patient in an austere environment.	SEP, SDL, ST	WBA, ITA, FEx

3.21 Paediatric Presentations

By the end of the relevant stage of training, demonstrate knowledge and understanding of paediatric presentations and apply this to the management of these patients in the emergency department. Paediatric patients are defined as those under 16 years of age.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Comparative anatomy and physiology of the newborn, 2 year old, 5 year old, and adolescent. 1.2 Pathophysiology of non-critical illness and injury in children, as compared to adults. 1.3 Approach to the assessment of a paediatric patient, with consideration of age and development of the child, use of age appropriate communication and assessment tools e.g., HEADSSS assessment. 1.4 Paediatric considerations of fundamental pharmacological principles, including pharmacokinetics, drug metabolism and weight-based prescribing. 1.5 Conduct a brief initial assessment of a child to determine the requirement for resuscitation. 1.6 Indications, contraindications, complications and basic medical science principles underpinning the procedures to be performed independently by the end of TS1. 1.7 Understand the concept that children live within the context of families, society, schools and extended families. 1.8 Public health as pertains to paediatric emergency medicine. 1.9 The special needs of vulnerable children, including those in temporary care, looked after children, children with chronic illness, children at risk of harm and those that live in situations of domestic violence and poverty. 1.10 Understand the importance of public health promotion in paediatrics including promotion of breast feeding, accident prevention, immunisations, water safety, creating safe homes.	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
	Be able to:		
	1.11 Recognise the severely ill or deteriorating child and recruit help when treating, as required. 1.12 Demonstrate suitable approaches to vulnerable children 1.13 Perform basic life support in the arrested child, including the relevant algorithms. 1.14 Provide standard first line treatment in advanced paediatric life support algorithms for the critically ill or injured child. 1.15 Independently perform the following airway and breathing procedures: (a) Basic airway manoeuvres (b) Insertion of oropharangeal or nasopharyngeal airway (c) Use of self-inflating bag for ventilation	SEP, ST	PEx(W), PEx (VIVA), WBA, ITA, PER, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1 continued	1.16 Independently perform the following circulation procedures: (a) External chest compressions (b) Defibrillation (manual and AED) (c) Venipuncture (d) Arterial puncture for blood sampling 1.17 Independently perform the following neurological and orthopaedic procedures: (a) In-line cervical spine immobilisation (b) Full spinal immobilisation, log roll, transfer (c) Backslab application (d) Application of sling/collar and cuff 1.18 Assess pain in a paediatric patient and prescribe analgesia, including suitable adjuncts. 1.19 Independently perform the following sedation and anaesthesia procedures: (a) Topical anaesthesia (b) Direct infiltration of local anaesthetic (c) Digital nerve block 1.20 Perform basic skin suturing techniques and alternate skin closure, such as tissue adhesive, staples. 1.21 Analyse and interpret investigations performed in paediatric patients, including blood tests and plain radiology images. 1.22 Independently perform direct ophthalmoscopy. 1.23 Independently perform the removal of superficial foreign bodies from nose and ear.	SEP, ST	PEx(W), PEx (VIVA), WBA, ITA, PER, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Patterns in presentation of non-critical illness and injury in children of various age groups (under 3 months, 3 months to 2 years, 2 to 5 years, 5 to 12 years, adolescent), including: (a) Fever (b) Dehydration (c) Vomiting (d) Crying infant (e) Abdominal pain (f) Rash (g) Feeding problems (h) Head injury (i) Congenital syndromes (e.g., Trisomy 21) (j) Gastroesophageal reflux (k) Ovarian and testicular torsion (l) Bronchiolitis, viral induced wheeze (m) Asthma (n) Respiratory tract infection (o) Anaphylaxis (p) Haematological presentations (q) Soft tissue and bony injuries (r) Non accidental, inflicted injuries and neglect	SEP, SDL, ST	WBA, ITA, PER, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS2 continued	2.2 Pathophysiology of critical illness and injury in children and how this differs to adults. 2.3 Patterns in presentations of critical illness and injury, including toxicological, trauma, and sepsis in children of various age groups (newborn, under 3 months, 3 months to 2 years, 2 to 5 years, 5 to 12 years, adolescent), including: (a) The collapsed neonate (b) Congenital heart disease (c) Arrhythmia (d) Metabolic disease (e) Respiratory distress (f) Seizures, altered mental state (g) Infections/sepsis, including occult bacteraemia (h) Acute behavioural disturbance (i) Sudden Unexplained Death in an Infant 2.4 Physiological changes occurring in the newborn at birth. 2.5 Common presentations in the newborn within four hours of birth. 2.6 Approaches to functional complaints in children.	SEP, SDL, ST	WBA, ITA, PER, FEx
	Be able to:		
	2.7 Apply evidence-based care to a broad range of paediatric presentations. 2.8 Undertake a focused history and physical examination for a patient less than 3 months, less than 24 months, a preschool-aged child, and an older child with non-critical presentations. 2.9 Take into consideration the impact of illness and injury on families and siblings when treating children. 2.10 Create an appropriate investigation plan for a complex paediatric presentation. 2.11 Generate an appropriate provisional and differential diagnosis relevant to the age of the patient for non-critical care presentations of low and medium complexity. 2.12 Organise and initiate an appropriate treatment plan for children with common non-critical diagnoses. 2.13 Formulate a management plan for psychiatric acute crises in paediatric patients. 2.14 Utilise observational medicine appropriately when managing paediatric patients. 2.15 Recognise a critically ill, injured or deteriorating child and activate appropriate systems, including calling for help. 2.16 Tailor an initial treatment plan to the patient based on the problems presented and the provisional diagnosis, as applicable. 2.17 Create initial treatment plans for the specific diagnoses found in non-critically ill or injured children. 2.18 Modify the initial treatment plan in response to newly discovered information to create a definitive treatment and discharge plan. 2.19 Transfer discharge plans to the responsible parent/carer, GP services, and other health agencies. 2.20 Summarise salient points when presenting patient at handover or when referring to inpatient services.	SEP, SDL, ST	WBA, ITA, PER, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS2 continued	2.21 Independently perform the following airway and breathing procedures: (a) Insertion of a laryngeal mask airway (b) Nasogastric and orogastric tube insertion 2.22 Independently perform the following circulation procedures: (a) Paediatric peripheral intravenous access (b) Intraosseous access (c) Preparation and operation of transport monitoring equipment 2.23 Independently perform the following fluids procedures: (a) Non-invasive urine collection (b) Insertion of an infant urinary catheter (male & female) (c) Suprapubic aspiration of urine in an infant, with and without ultrasound guidance (d) Lumbar puncture and measurement of CSF opening pressure 2.24 Independently perform the following orthopaedic procedures: (a) Pelvic binding device, traction splinting (b) Emergency reduction of fracture or major joint dislocation. 2.25 Manage behavioural disturbance in paediatric patients. 2.26 Independently perform the following ENT and eye procedures: (a) Removal of corneal foreign bodies (b) Use of slit lamp in the eye examination	SEP, SDL, ST	WBA, ITA, PER, FEx
TS3	***Demonstrate knowledge and understanding of:*** 3.1 Medications and other substances that, if a single adult dose is ingested by a child, is potentially lethal. 3.2 Principles of first line treatment in newborn resuscitation, including the use of the infant resuscitaire. 3.3 Adolescent presentations and their multidisciplinary management 3.4 Modifications to assessment and management of illness and injury in children with the following co-morbidities: (a) Acute behavioural disturbance (b) Functional disorders (c) Behavioural disorders such as autistic spectrum and ADHD 3.5 Principles of chronic disease management in paediatric patients. 3.6 Indications, contraindications, complications and basic medical science principles underpinning the procedures to be performed independently by the end of TS3. 3.7 Initiate appropriate time critical interventions for a child, such as bag valve mask ventilation. 3.8 Generate an appropriate provisional and differential diagnosis relevant to age for high complexity patients, including post-resuscitation patients. 3.9 Appropriately use critical care monitoring equipment.	SEP, SDL, ST	WBA, ITA, PER, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3 continued	***Be able to:***		
	3.10 Independently perform the following airway and breathing procedures: (a) Use of non-self-inflating bag (T-piece) for ventilation/neopuff (b) Use of paediatric non-invasive ventilation device (high flow nasal cannula therapy, if available, mask CPAP/BiPAP and bubble CPAP) (c) Direct laryngoscopy, insertion of oral ETT, use of RSI technique (d) Securing and caring for ETT, including during transport (e) Emergency replacement of blocked or dislodged tracheostomy tube (f) Set up a transport ventilator (g) Decompression needle/finger thoracostomy (h) Tube thoracostomy 3.11 Independently perform the following circulation procedures: (a) DC cardioversion (b) External pacing 3.12 Independently perform the following fluids procedures: (a) Emergency replacement of a dislodged gastrostomy tube 3.13 Independently administer: (a) Procedural sedation (b) Femoral nerve block (c) Fascia iliaca block	SEP, SDL, ST	WBA, ITA, PER, FEx
TS4	***Demonstrate knowledge and understanding of:***		
	4.1 Principles of troubleshooting resuscitation when a patient does not respond to first line therapy and/or standard resuscitation methods. 4.2 Principles of managing patient flow and communication with teams to best service paediatric patients. 4.3 Clinical governance and safety of paediatric patients attending emergency departments.	SEP, SDL, ST	WBA, ITA, PER, FEx
	Be able to:		
	4.4 Perform standard first line treatment in neonatal resuscitation. 4.5 Resuscitate a child who does not respond to first line therapy or standard paediatric resuscitation algorithms. 4.6 Demonstrate a safe approach to the ongoing management of a critically ill or injured child prior to transfer to a definitive paediatric critical care unit. 4.7 Prepare a stabilised critically ill/injured child for transport to a definitive paediatric critical care unit or for retrieval to another hospital. 4.8 Independently administer peripheral nerve blocks other than femoral nerve or fascia iliaca block.	SEP, SDL, ST	WBA, ITA, PER, FEx

3.22 Geriatric Emergency Medicine

By the end of the relevant stage of training, demonstrate knowledge and understanding of geriatric presentations and apply this to the management of these patients in the emergency department. It is acknowledged that the majority of presentations in the adult sections of this curriculum are applicable to older patients but may have different differential diagnoses. Geriatric patients are defined as those 65 years of age or older, though it is recognised that determinants other than the patient's chronological age, including physiological, pathological, psychological, and social factors, may impact the need for geriatric expertise.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Physiological changes of ageing. 1.2 Changes in pharmacokinetics and pharmacodynamics in older patients. 1.3 Polypharmacy and adverse reactions, including drug-drug and drug-disease interactions. 1.4 Geriatric syndromes and their relevance to emergency management of older persons including: (a) Frailty (b) Delirium (including subtypes) (c) Falls (d) Pressure injury (e) Incontinence 1.5 Increased prevalence of cognitive and sensory impairments in older patients and their impact on; (a) Increased risk of accidental injury (b) Increased risk of accidental overdose (c) Assessment and management in the ED	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
	Be able to:		
	1.6 Elicit a history from older persons, their family/whānau and carers. 1.7 Perform a medication review, especially for older persons presenting with falls or with polypharmacy. 1.8 Identification and progression of pathology in common presentations of older people. 1.9 Pain assessment and management in older persons and in those with cognitive impairment. 1.10 Modifications to emergent interventions for older patients based on anatomical or physiological changes, risk assessment and goals of care. 1.11 Trauma management in older persons, including the increased risk of potentially avoidable complications. 1.12 Assessment and management (non-pharmacological and pharmacological) of behavioural disturbance in older patients. 1.13 Identification, management and prevention of iatrogenic injuries and their complications, including those associated with: (a) Bladder catheterisation, (b) Spinal immobilisation, (c) Invasive line placement (d) Skin tears and pressure injuries	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1 continued	1.14 Altered laboratory findings and interpretation of investigations in older patients. 1.15 Common presentation patterns in older patients, including: (a) Delirium (b) Abdominal pain (c) Falls or collapse (d) Sepsis and common causes of infection (e) Chronic wounds	SEP, SDL, ST	PEx(W), PEx (VIVA), WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Risks of under-triage in older patients. 2.2 Discharge risk assessment and multidisciplinary team assessment in older persons. 2.3 Optimising transitions of care including specific discharge needs of older persons living in residential aged care. 2.4 Signs and injury patterns that suggest elder abuse. 2.5 Law and ethics in the care of older persons, including: (a) Advance care directives and hierarchy of substitute decision makers (b) Defining goals of care (c) Involvement of the coroner 2.6 Atypical and subtle presentations of disease in older persons and the increased risk of diagnostic error.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.7 Assess and manage common geriatric emergencies and presentations, including: (a) Geriatric trauma, including falls and hip fracture (b) Weakness, immobility, (c) Dizziness, balance and gait disorders (d) Cognitive, behavioural and psychological/mood disorders, including dementia, delirium, depression and anxiety (e) Side effects from polypharmacy use (f) Toxicological presentations, including acute and chronic, intentional and accidental (g) Skin care / chronic wounds 2.8 Provide end of life care for the older patient in the ED. 2.9 Co-ordinate a functional assessment in the older patient, including mobility assessment, Activities of Daily Living (ADLs) and Instrumental ADLs, and incorporate findings into the management plan. 2.10 Generate a differential diagnosis for an older patient's presentation. 2.11 Screen for comorbid conditions and potential complications of current treatment. 2.12 Screen the home environment details, including availability, capability and stress of formal and informal caregivers. 2.13 Co-ordinate the care of older patients, involving multiple different agencies as required.	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3	***Be able to:***		
	3.1 Safely perform procedures in older patients, with recognition and treatment of iatrogenic injuries and complications when they occur. 3.2 Manage incidents of abuse and neglect, in accordance with institutional and state guidelines. 3.3 Recruit an increased variety of agencies when managing older patients with concurrent medical and mood disorders.	SEP, SDL, ST	WBA, ITA, FEx

3.23 Procedures in Emergency Medicine

Emergency Medicine Physicians are expected to:

- Demonstrate understanding of how the procedure is performed, indications, contraindications and potential complications, underpinned by knowledge of the basic sciences that form the foundations of emergency medicine.
- Decide to conduct the procedure during the clinical assessment of the patient's presentation.
- Be able to prepare the patient (education, consent, positioning), equipment, medications, and staff for the procedure.
- Be able to technically perform the procedure, efficiently and safely.
- Maintain situational awareness, managing any complications if they arise during and/or after the procedure.
- Provide appropriate post-procedure management, including follow-up investigations, clinical care and documentation.
- Provide appropriate discharge advice to the patient and/or carers.

For almost all procedures listed here, and further detailed in the Medical Expertise domain of the FACEM Curriculum, Emergency Medicine Physicians are required to perform them independently, though a select few may be performed under supervision of suitably credentialled clinicians. The list provides guidance as to the level of mastery expected of trainees as they progress through the stages of the FACEM Training Program. A level of independence has been assigned to each stage of training for each procedure. It is expected that trainees will acquire the requisite knowledge and skills to perform the procedure ***under direct supervision (S)*** of senior clinicians and advance to ***independent (I)*** performance, using at least one approach, with further experience and consolidation of skill, in both simulated and real patient interactions. It is acknowledged that these assigned mastery levels are based on performance in non-challenging situations.

Procedures listed as ***common in emergency medicine (C)*** should present opportunities to master performance in real patient encounters. For those procedures categorised as ***life/limb/sight saving (LS)***, trainees are expected to achieve the mastery level at least in simulation if real life opportunities to practice this procedure are rare.

All procedures are learned through the accredited training site's structured education program and via supervised training and are assessed in workplace-based assessments (WBAs) and through relevant questions in all examinations. In addition, the following procedures are considered core to emergency medicine practice, and are formally assessed as part of the **Procedural Requirement**:

Procedure	Performed on	Assessed in
Advanced airway	Adult patient	ED
Procedural sedation	Adult patient	ED
Regional anaesthesia (Bier's or peripheral nerve block)	Adult or paediatric patient	ED
Emergent fracture reduction (wrist, ankle)	Adult or paediatric patient	ED
Reduction of dislocated major joint (shoulder, elbow, hip)	Adult or paediatric patient	ED
DC cardioversion	Adult or paediatric patient	ED
Ultrasound – eFAST, AAA, Lung, FELS	Adult or paediatric patient	ED
Corneal foreign body removal or nasal passage packing	Adult or paediatric patient	ED
Tube thoracostomy	Adult or paediatric patient	ED or Critical Care or Trauma SSP
Lumbar puncture	Adult or paediatric patient	ED or Critical Care
Central venous access	Adult or paediatric patient	ED or Critical Care or Trauma SSP
Arterial line insertion	Adult or paediatric patient	ED or Critical Care or Trauma SSP

Procedures in Emergency Medicine

PROCEDURE * See Procedural Requirement on p.108	Category C = common in EM LS = life/limb/sight saving	Level of mastery S = under direct supervision I = independent			
		End TS1	End TS2	End TS3	End TS4
Infection control					
Aseptic and sterile technique	C	I			
Airway					
Basic airway manoeuvres *Chin lift, jaw thrust, head tilt, positioning*	C, LS	I			
Insertion of oropharangeal or nasopharyngeal airway	C, LS	I			
Insertion of a laryngeal mask airway	C, LS	S	I		
Direct laryngoscopy, insertion of oral ETT, use of RSI technique* *Including drugs, stylet, bougie*	C, LS		S	I	
Video laryngoscopy*	C, LS		S	I	
Use of other rescue difficult airway device	LS		S	I	
Securing and caring for ETT including during transport	C, LS		S		
Insertion of cricothyroid needle and jet insufflation of oxygen (adult & child)	LS			S	I
Cricothyroidotomy	LS			S	I
Emergency replacement of blocked or dislodged tracheostomy tube	LS			S	I
Extubation				I	
Indirect laryngoscopy *Use of dental mirror to examine for FB*				I	
Breathing					
Spirometry and Peak Flow measurement	C	S	I		
Use of oxygen delivery devices	C, LS	I			
Use of self-inflating bag for ventilation	C, LS	I			
Use of a non-self-inflating bag for ventilation				S	I
Use of adult non-invasive ventilation device	C, LS	S	I		
Use of paediatric non-invasive ventilation device	LS			S	I
Setting up a transport ventilator	C, LS		S	I	
Decompression needle/finger thoracostomy	C, LS		S	I	
Pleurocentesis	C		S	I	
Tube thoracostomy*	C, LS		S	I	
Circulation					
External Chest Compressions *Infant, paediatric, adult*	C, LS	I			
Defibrillation	C, LS	I			
DC cardioversion*	C, LS		S	I	
External pacing	LS		S	I	
Venipuncture	C	I			
Adult peripheral intravenous access	C, LS	I			
Paediatric peripheral intravenous access	C,LS	S	I		
Insertion of a rapid infusion catheter	LS		I		

Procedures in Emergency Medicine

PROCEDURE * See Procedural Requirement on p.108	Category C = common in EM LS = life/limb/sight saving	Level of mastery S = under direct supervision I = independent			
		End TS1	End TS2	End TS3	End TS4
Circulation continued					
Intraosseous access	C, LS	S	I		
Arterial puncture for blood sampling	C	I			
Arterial line insertion*	C		S	I	
Preparation & operation of transport monitoring equipment	C		I		
Insertion of a central venous line*	C			I	
Emergency pericardiocentesis	LS			I	
Resuscitative thoracotomy	LS				S
Insertion of a temporary pacing wire	LS				S
Fluids					
Preparation of an intravenous fluid or blood product line	C	I			
Insertion of a nasogastric tube or orogastric tube	C	I			
Insertion of an adult urinary catheter	C	I			
Insertion of an infant urinary catheter	C		S	I	
Suprapubic aspiration of urine in an infant	C		S	I	
Insertion of a suprapubic catheter				I	
Replacement of a suprapubic catheter	C	S	I		
Abdominal paracentesis and insertion of drain	C	S	I		
Insertion of oesophageal & gastric balloon devices	LS			I	
Emergency replacement of a dislodged gastrostomy tube	C		S	I	
Orthopaedic & Neurological					
Sizing and application of a rigid cervical collar	C, LS	I			
In-line cervical spine immobilisation	C, LS	I			
Full spinal immobilisation, log roll, and transfer	C, LS	I			
Emergent Fracture / Dislocation Reduction*	C, LS	S	I		
Joint reduction – Digits	C	I			
Joint reduction – major joints*	C, LS	S	I		
Fracture/Joint immobilisation techniques, including limb splinting	C	S	I		
Fracture/Joint immobilisation – Backslab application	C	I			
Application of sling/ collar and cuff	C	I			
Insertion of a fascial intra-compartmental monitor					S
Application of a pelvic binding device	C, LS	S	I		
Application of traction splinting devices	C, LS	S	I		
Arthrocentesis (knee)	C	S	I		
Sedation delivery					
Administration of procedural sedation*	C		S	I	
Administration of chemical restraint	C	S	I		

Procedures in Emergency Medicine

PROCEDURE * See Procedural Requirement on p.108	Category C = common in EM LS = life/limb/sight saving	Level of mastery S = under direct supervision I = independent			
		End TS1	End TS2	End TS3	End TS4
Regional anaesthesia					
Use of topical anaesthesia	C	I			
Direct infiltration of local anaesthetic	C	I			
Digital Nerve Block	C	I			
Femoral nerve and fascia iliaca block*	C		S	I	
Other peripheral nerve blocks				S	I
Intravenous anaesthesia and Biers block*			S	I	
Wounds					
Basic skin suturing techniques	C	I			
Alternate skin closure *Tissue adhesive, staples*	C	I			
Advanced suturing techniques	C	S	I		
Wound exploration, cleaning, irrigation, and debridement	C	S	I		
Superficial open wound dressing	C	S	I		
Open wound packing	C	S	I		
Burns					
Burn first aid	C	I			
Primary burn dressing	C	I			
Escharotomy	LS			I	
Minor Surgical					
Removal of superficial & subcutaneous foreign bodies	C	I			
Incision and drainage of simple, superficial abscesses	C	S	I		
Drainage of a paronychia	C	S	I		
Drainage of a subungual haematoma	C	S	I		
Incision and drainage of a thrombosed external haemorrhoid	C		S	I	
Drainage of peritonsillar abscess				S	
Nail bed repair	C			S	
Obstetric & Gynaecological					
Vaginal speculum insertion	C	S	I		
Removal of products of conception from cervical os	C LS		S	I	
Use of foetal doppler	C		S	I	
Spontaneous vaginal delivery	LS		S	I	
Microbiology					
Collection of blood culture	C	I			
Lumbar Puncture and measurement of CSF opening pressure*	C	S	I		
Paediatric non-invasive urine collection	C	S	I		
Collection of swabs	C	I			
Nasopharyngeal aspirate collection	C	S	I		

Procedures in Emergency Medicine

PROCEDURE * See Procedural Requirement on p.108	Category C = common in EM LS = life/limb/sight saving	Level of mastery S = under direct supervision I = independent			
		End TS1	End TS2	End TS3	End TS4
Otolaryngological					
Removal of nasal foreign bodies	C	S	I		
Removal of aural foreign bodies	C	S	I		
Removal of laryngeal foreign bodies	C	S	I		
Nasal speculum insertion	C	I			
Nasal cautery	C	S	I		
Anterior nasal packing*	C, LS	S	I		
Posterior nasal packing*	LS	S	I		
Aural toilet	C	S	I		
Aural wick insertion	C	S	I		
Ophthalmological					
Removal of corneal foreign bodies*	C	S	I		
Direct ophthalmoscopy	C	I			
Use of a slit lamp in the eye examination	C	S	I		
Tonometry	C	S	I		
Eye irrigation	C, LS	I			
Application of an eye pad or shield	C	S	I		
Lateral canthotomy	LS			S	I
Dental					
Joint reduction: Temporo- mandibular joint	C		S	I	
Enlocation avulsed/extruded/intruded/ laterally injured tooth	C		S	I	
Temporary stabilisation of injured tooth	C		S	I	
Haemostasis following dental extraction	C		S	I	
Ultrasound					
Focused Echocardiography in Life Support (FELS)*	C		S	I	
Performance of Focused Assessment with Sonography for Trauma (FAST) or EFAST*	C			S	I
Pneumothorax / haemothorax detection*	C			S	I
Detection & characterisation of an abdominal aortic aneurysm*	C			S	I
Guided Peripheral Vascular Access	C	S	I		
Guided Central Vascular Access	C		S	I	
Ultrasound guided nerve blocks			S	I	
Identification of distended bladder	C			S	I
Toxicology/Toxinology					
Pressure immobilisation Bandage	C, LS	I			
Gastrointestinal decontamination *Gastric decontamination, whole bowel irrigation.*	LS		S	I	
Environmental					
Basic warming and cooling techniques *External methods, IV fluids*	C, LS	S	I		
Advanced warming and cooling techniques	LS		S	I	

Prioritisation and Decision Making

1. Prioritisation of Patient Management

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Apply accepted clinical guidelines and algorithms to prioritise treatment of a patient. 1.2 Prioritise the essential tasks in a medium complexity patient with low acuity. 1.3 Manage more than one task and more than one patient at a time, with guidance. 1.4 Respond to a surge in patient presentations by altering work rate.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Prioritise the assessment and management of a patient using the paucity of available information. 2.2 Prioritise essential tasks in any medium complexity patient. 2.3 Adapt workload priorities in response to deterioration in a patient's circumstances or condition. 2.4 Simultaneously assess and manage multiple patients of any age with simple presentations. 2.5 Respond to a surge in patient presentations by accepting redeployment to different areas of the department.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Prioritise the assessment and management of a patient with a critically acute presentation. 3.2 Prioritise the essential tasks in a high complexity patient. 3.3 Adapt workload priorities in response to changes in departmental needs. 3.4 Simultaneously assess and manage multiple patients of any age with complex presentations. 3.5 Respond to a surge in patient presentations by reprioritising workload.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Prioritise the essential tasks in a patient with a rare presentation. 4.2 Delegate specific tasks from their own workload appropriately, according to departmental needs. 4.3 Simultaneously assess a critically ill or injured patient whilst overseeing other patients in the ED. 4.4 Recognise an acute and sustained disaster situation and activate the appropriate organisational response. 4.5 Apply modified risk stratification and prioritisation processes during patient surges and disasters.	SEP, SDL, ST	WBA, ITA, FEx

2. Clinical Risk

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Apply the triage process and risk stratification tools, with particular regard to differences in these for children and older people, to patients in the emergency setting. 1.2 Identify high-risk features in a clinical assessment that increase the likelihood of a particular diagnosis. 1.3 Use a structured risk assessment tool or pathway, which is appropriate for the presentation, to create an investigation plan and to estimate the likelihood of a particular diagnosis. 1.4 Use a structured risk stratification tool or pathway to create a safe treatment and disposition plan. 1.5 Apply understanding of the impact of social and cultural factors on clinical risk to the management of patients in the emergency department. 1.6 Apply the principles of patient safety to work in the emergency setting. 1.7 Identify high-risk events that increase the likelihood of an adverse patient outcome. 1.8 Apply the principles of situational awareness to recognising cause and effect of clinical events. 1.9 Apply the principles of barrier care, including aseptic and sterile technique to minimise infectious risk.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Identify the human and departmental factors that may impact patient care. 2.2 Apply understanding of common barriers to safe and timely decision making by adapting behaviours to minimise the risk of error and suboptimal care. 2.3 Identify and minimise risks associated with patient handover. 2.4 Recognise cause and effect of slowly evolving or predictable events as they occur. 2.5 Manage the most immediate problem whilst remaining vigilant for other potential problems. 2.6 Integrate infection control principles into daily clinical practice. 2.7 Demonstrate understanding of common barriers to safe and timely decision making. 2.8 Demonstrate understanding of human and departmental factors that contribute to error and suboptimal patient care. 2.9 Demonstrate understanding of strategies that minimise the risk of error and suboptimal care, including clinical handover. 2.10 Apply patient safety principles in the management of multiple patients.	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3	***Be able to:***		
	3.1 Apply understanding of how human and departmental factors, including institutional racism and unconscious bias, may contribute to error and suboptimal patient care by adapting behaviours to minimise risk of error and suboptimal care. 3.2 Use clinical acumen and understanding of specific statistical data to individualise the risk assessment of a patient. 3.3 Recognise clinical handover as an opportunity to increase safety and accuracy in decision making. 3.4 Anticipate and prepare for likely events in the near future. 3.5 Manage multiple problems simultaneously whilst remaining vigilant for other potential problems. 3.6 Filter crucial factors from the available information and recognise when available information is incomplete. 3.7 Facilitate contact tracing and follow up conducted by external public health authorities. 3.8 Demonstrate self-reflective practice when contemplating one's own implicit bias. 3.9 Use effective strategies to minimise the risk of error and suboptimal care in patients in the emergency department	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Use clinical acumen to estimate the level of risk to a patient who has ceased their emergency care prematurely. 4.2 Advise colleagues on risk stratification processes applied to clinical emergency medicine. 4.3 Anticipate and prepare for multiple potential problems. 4.4 Demonstrate continued situational awareness with increased task loading. 4.5 Evaluate the integrity of the available information. 4.6 Contribute to the development of policy and procedures on infection control and barrier care. 4.7 Develop and implement changes resulting from quality activities associated with infection control. 4.8 Adapt infection control procedures to successfully manage disasters and pandemics.	SEP, SDL, ST	WBA, ITA, FEx

3. Decision making

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Apply the principles of clinical and diagnostic reasoning in clinical emergency medicine. 1.2 Apply a problem-solving approach to guide patient treatment. 1.3 Decide to initiate resuscitation when a patient is recognised as critically ill or deteriorating. 1.4 Demonstrate an understanding that decisions must be made in order to progress patient care. 1.5 Justify the decision to admit a patient with a simple presentation. 1.6 Justify the decision to admit a patient with a medium complexity non-critical presentation to a particular inpatient unit, based on a clear diagnosis. 1.7 Decide to commence an appropriate clinical treatment pathway matched to the patient presentation. 1.8 Make safe and timely decision for a simple patient presentation. 1.9 Justify the decision to discharge a patient with a simple presentation.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 The role of analytical thinking versus pattern recognition thinking in clinical emergency medicine.	SEP, SDL, ST	ITA, FEx
	Be able to:		
	2.2 Apply the understanding of analytical thinking and pattern recognition to decision making. 2.3 Use basic sciences to explain patient findings and treatment. 2.4 Incorporate patient and family/whānau needs as part of shared decision-making. 2.5 Identify distinct moments in the patient journey where a decision must be made in order to progress patient care. 2.6 Identify potential gaps in decision making. 2.7 Justify the decision to admit a patient with a non-complex presentation to a critical care unit based on a clear diagnosis. 2.8 Justify the decision to discharge a patient with a medium complexity presentation with a clear plan.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Principles of decision-making styles, including type 1 and type 2 thinking.	SEP, SDL, ST	ITA, FEx
	Be able to:		
	3.2 Apply the cognitive steps in the clinical reasoning process and understanding of causes of decision-making errors to patient management in the emergency setting. 3.3 Incorporate input from colleagues to inform decisions. 3.4 Decide appropriately what treatment to commence when supplied with incomplete and uncertain information. 3.5 Make safe and timely decision for a complex or critical patient presentation.	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3 continued	3.6 Facilitate early decision making by others to expedite patient care. 3.7 Justify the decision to admit a patient with a high complexity presentation to a particular inpatient unit, based on expected clinical course. 3.8 Logically explain the disposition decisions made.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Demonstrate knowledge and understanding of:***		
	4.1 Conditions that promote optimal decision making in clinical emergency medicine. 4.2 Common types of bias that may affect decision making.		
	Be able to:		
	4.3 Apply clinical reasoning to justify a decision that is made. 4.4 Reflect on the clinical reasoning process to clarify why a decision is made and recognise decisions that lead to an error. 4.5 Explain the decision to limit assessment and treatment. 4.6 Decide to recruit specific additional staff and resources to initiate time-critical patient care. 4.7 Justify own decisions as they occur and made timely corrections. 4.8 Review the decisions of others to seek and address situations where either no decision or an incorrect decision has been made. 4.9 Incorporate input from peers to inform shared decision-making for a complex critical patient where there is no clear course of action. 4.10 Negotiate referral of a patient to multiple specialities. 4.11 Justify the decision to discharge a patient with a complex presentation after a prolonged period of observation. 4.12 Justify the decision to transfer a patient to another health care facility. 4.13 Specify the resources that will be required to address ongoing post-disposition needs, including allied health and psychosocial support.	SEP, SDL, ST	WBA, ITA, FEx

Communication

1. Principles of Effective Communication

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Common modifications used when communicating with specific populations and cultures, including Aboriginal and Torres Strait Islander peoples and Māori.	eLM, ST	ITA, FEx
	Be able to:		
	1.2 Apply understanding of principles of good communication and active listening to communication in practice. 1.3 Utilise opportunities, such as ward rounds, to optimise communication across the multidisciplinary healthcare team. 1.4 Recognise how diversity in communication styles can impact upon effective care. 1.5 Identify whether communicated information has been understood. 1.6 Consider the impact of health literacy to the exchange of information in the clinical setting. 1.7 Identify barriers to effective verbal and non-verbal communication within the emergency medicine context, and their impact on effective care. 1.8 Identify key aspects of communicating with patients who have medical conditions that affect their ability to communicate. 1.9 Recognise factors that may cause information to be interpreted as bad news by a patient or carer. 1.10 Recognise that the way bad news is delivered can have long term effects on a patient or carer. 1.11 Recognise the value of having family/whanau or a support person present to clarify information and aid understanding for a patient.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Demonstrate the ability to establish rapid rapport. 2.2 Interpret the non-verbal cues of others. 2.3 Identify the risks associated with ineffective communication. 2.4 Adapt communication style to minimise errors in patient assessment and management. 2.5 Reach a negotiated understanding of the patient's situation. 2.6 Identify strategies for assessing and improving health literacy. 2.7 Apply strategies to overcome communication barriers in the ED. 2.8 Recruit and use additional resources to communicate with patients with extra communication needs. 2.9 Work effectively with professional interpreters. 2.10 Prepare an appropriate environment to convey bad news. 2.11 Communicate bad news clearly, compassionately and sensitively to a patient and/or carer and convey acceptance of their reaction. 2.12 Empathise with, show compassion and support a patient and/or carer when conveying bad news.	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3	***Be able to:***		
	3.1 Tailor communication style to the needs of the individuals involved. 3.2 Display the use of verbal and non-verbal communication skills to assist in the de-escalation of conflict. 3.3 Display the use of active listening to explore a patient's concerns and expectations. 3.4 Convey clear information about diagnosis, risk-benefit considerations, and treatment options to a patient, tailored to their age, cultural background and health literacy. 3.5 Implement strategies for assessing and improving health literacy. 3.6 Apply understanding of diverse range of expressions of bereavement and grief to the management of emotional reactions invoked when conveying bad news. 3.7 Recognise when the patient and/or carer will require further opportunities and support to fully comprehend the information delivered.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Utilise a range of strategies that enhance effective communication within the workplace. 4.2 Adapt communication effectively during complex and time critical events. 4.3 Create a shared management plan. 4.4 Provide skills, advice and resources to junior doctors and other members of the ED team in order to overcome communication barriers and minimise risk to patient care. 4.5 Use a range of communication strategies to facilitate discussion of sensitive issues with patients, families and other staff.	SEP, SDL, ST	WBA, ITA, FEx

2. Communication with Colleagues

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Create clear, accurate, legible and timely patient records. 1.2 Communicate effectively and compassionately with colleagues of differing cultural background to oneself. 1.3 Use clinical notes to reflect the sequence of events during a patient encounter. 1.4 Accurately convey the assessment findings, provisional diagnosis, management plan, and reason for referral, when referring a patient to a colleague for consultation, admission, or follow-up. 1.5 Apply structured referral techniques to effectively communicate to colleagues and negotiate referral to multiple specialties. 1.6 Seek relevant information from colleagues and peers in the process of patient assessment and delivery of care. 1.7 Record performance of procedures, including consent and management of complications. 1.8 Operate electronic patient management systems to update patient's management status regularly. 1.9 Demonstrate effective telephone communication skills. 1.10 Create a discharge or referral letter that summarises the current patient episode and any outstanding issues. 1.11 Appropriately document handover of patient care. 1.12 Inform other team members of relevant patient care issues in a timely fashion. 1.13 Summarise a patient's assessment and management plan to another team member. 1.14 Convey clinical information in a structured format during handover, including transfer of unfinished assessment and management tasks. 1.15 Clarify outstanding tasks when receiving a handover.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Demonstrate effective use of electronic communication with primary health clinicians and community health agencies. 2.2 Utilise a structured approach to communication regarding trauma patients for handovers and referrals. 2.3 Produce succinct patient records and convey clinical reasoning when documenting a patient encounter.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Ensure clear documentation of the purpose and findings of a requested patient review. 3.2 Record advanced care orders, limitations of treatment and their reasons. 3.3 Apply understanding of benefits and risks associated with electronic patient management systems to the operation of these. 3.4 Write a concise discharge or referral letter that clearly outlines the ongoing management issues for a patient with multiple and complex post-discharge needs. 3.5 Appropriately document handover of patient care.	SEP, SDL, ST	WBA, ITA, FEx

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3 continued	3.6 Adapt communication skills to enhance the exchange of clinical information with colleagues.		
	3.7 Accurately highlight the immediate care needs and management priorities during referral.		
	3.8 Adapt communication style to ensure effective telemedicine communication and consultations.	SEP, SDL, ST	WBA, ITA, FEx
	3.9 Extract salient points relating to the patient's care and present these in a structured manner during handover.		
	3.10 Reassess and review management of the handover patient.		
TS4	***Be able to:***		
	4.1 Write a concise and accurate summary of key issues in any patient's care.		
	4.2 Record concise clinical summaries that clarify patient care plans.		
	4.3 Support junior staff in writing effective discharge letters that highlight key issues succinctly.		
	4.4 Apply the principles of appropriate, professional communication and compassion when making a challenging referral to another specialist.	SEP, SDL, ST	WBA, ITA, FEx
	4.5 Demonstrate effective communication skills when leading a telemedicine consultation.		
	4.6 Ensure that outstanding tasks handed over are relevant to the current emergency encounter.		
	4.7 Clarify and focus the clinical reasoning of the clinician providing information during handover.		

3. Intercultural Communication

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Principles of intercultural communication and culturally diverse communication styles. 1.2 Understand the potential barriers to effective intercultural communication that are specific to the ED. 1.3 Recognise one's own culture and communication style as a health practitioner. 1.4 Impact of cultural and linguistic differences on effective communication and patient outcomes and how cultural differences in communication styles can create misunderstandings. 1.5 Culturally diverse communication styles.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.6 Apply principles of effective intercultural communication and compassion to interactions with patients and colleagues. 1.7 Ask all patients about their ethnic or cultural identity in a safe manner. 1.8 Recognise situations where working with a professional interpreter is appropriate.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Linguistic diversity, including Indigenous and language use.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.2 Recognise cultural influence on one's own communication style. 2.3 Recognise cultural difference in non-verbal cues and symptom expression. 2.4 Develop rapport with patients and their families from varied cultural backgrounds. 2.5 Collaborate with Indigenous health care workers and other cultural support staff to facilitate communication. 2.6 Modify communication style, as required, with patients of different cultures. 2.7 Demonstrate ability to work effectively with professional interpreters.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Integrate intercultural knowledge into all communications within the emergency medical setting. 3.2 Identify when cultural differences can lead to miscommunication within the emergency medical setting. 3.3 Recognise culturally diverse communication styles and adapt communication style appropriately. 3.4 Effectively negotiate the risks involved when required to communicate through non-professional interpreters.	SEP, SDL, ST	WBA, ITA, FEx

4. Communication with Patients and Carers

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Elicit a thorough, relevant and accurate medical history. 1.2 Obtain collateral history from carers and witnesses. 1.3 Communicate the likely diagnosis and treatment plan to a patient. 1.4 Provide clear discharge information to a patient, including written material where appropriate. 1.5 Apply understanding of communication skills in children from pre-verbal age to adolescence to the use of age-appropriate communication strategies with paediatric patients. 1.6 Elicit the belief, wishes and expectations of a paediatric patient's parent(s) or carer(s).	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Adapt communication style to align with a patient of any age. 2.2 Demonstrate compassion when communicating with the patient, their family/whānau and/or carers.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Elicit a history in a focused and timely manner, while acknowledging the patient's other expressed concerns. 3.2 Elicit the beliefs, wishes, expectations and concerns of the patient, their family/whānau and/or carers, with regard to the patient's problem(s), diagnosis and treatment plan. 3.3 Convey clear information about diagnosis, risk/benefit considerations, and treatment options to a paediatric patient and their parents and/or carers. 3.4 Balance the communication needs of a paediatric patient with those of their parent and/or carers.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Demonstrate effective communication with patients in any situation. 4.2 Adapt communication style to effectively engage a paediatric patient and their parents and/or carers.	SEP, SDL, ST	WBA, ITA, FEx

Teamwork & Collaboration

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Features and benefits of good teamwork. 1.2 Scope of practice of all staff working in the ED, and prehospital health care staff. 1.3 Risks for patient care and health care outcomes if inadequate teamwork is not recognised or addressed. 1.4 Effective teamwork principles when assigned to a resuscitation team role. 1.5 Role of each member of the multidisciplinary team.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.6 Recognise and collaborate with the allocated medical team leader during a shift in the ED. 1.7 Use the collective knowledge of fellow clinicians on duty to ensure the creation of appropriate patient care plans. 1.8 Collaborate effectively with the multidisciplinary team during ward rounds to optimise patient care. 1.9 Integrate the knowledge and skills of pre-hospital medical and paramedical clinicians and other emergency services personnel to optimise the care of emergency patients. 1.10 Actively collaborate with emergency allied health staff to enhance patient care. 1.11 Undertake the role of team leader during an initial resuscitation with the use of basic resuscitation skills until senior colleagues can assist. 1.12 Effectively communicate the need to activate a resuscitation team. 1.13 Effectively communicate that a patient has deteriorated. 1.14 Contribute to a resuscitation team's information exchange. 1.15 Reflect on own performance and that of the team as a whole, with guidance from the team leader. 1.16 Perform the necessary tasks in standard multidisciplinary clinical pathways for appropriate patients. 1.17 Collaborate effectively with the patient's primary health care provider to ensure best outcomes in patient care. 1.18 Collaborate in a culturally appropriate way with Indigenous health care workers and other cultural support staff to optimise cultural safety. 1.19 Collaborate with patients and family/whānau members/carers to create and enact patient management plans for the immediate encounter.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Effect of communication and personality on team performance.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.2 Integrate the knowledge and skills of other clinicians involved to arrive at an optimal plan for patient care. 2.3 Incorporate the patient and other appropriate carers as team members when deciding and providing patient care. 2.4 Undertake a variety of resuscitation team roles.	SEP, SDL, ST	WBA, ITA, FEx

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
	2.5 Identify when other team members require assistance with their role and communicate this to the team leader. 2.6 Utilise graded assertiveness to communicate patient safety issues to the team leader. 2.7 Demonstrate flexibility and adaptive behaviours when working in a team. 2.8 Undertake the role of team leader during a routine resuscitation which responds to first line therapy. 2.9 Respond appropriately to questions asked by team members during a resuscitation. 2.10 Provide constructive feedback to other team members during a debriefing. 2.11 Provide an appropriate referral to a member of the multidisciplinary team. 2.12 Incorporate knowledge from non-emergency clinicians to refine the differential diagnosis. 2.13 Show compassion when interacting and collaborating with colleagues. 2.14 Use a multidisciplinary approach to create clear ongoing patient care plans with other hospital clinicians.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Strategies for addressing ineffective teamwork in the ED.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	3.2 Integrate teamwork principles into daily practice relevant to optimal care of individual patients. 3.3 Reflect on performance within a team for the purpose of ongoing improvement. 3.4 Perform as a member of a well-functioning team with all other clinicians in the immediate patient encounter. 3.5 Support the performance of other team members to produce optimal teamwork. 3.6 Perform as a good team leader in a variety of ED settings. 3.7 Assemble effective clinical teams in different ED contexts. 3.8 Collaborate with other emergency medicine professionals for the purposes of contributing to the creation of best practice guidelines. 3.9 Resolve conflict between ED team members to ensure ongoing optimal patient care. 3.10 Apply effective teamwork principles when working in teams of various numbers and skill levels. 3.11 Allocate and brief a resuscitation team prior to the arrival of a critical patient. 3.12 Undertake the role of team leader during a resuscitation which requires more advanced therapeutics, such as in the case of a paediatric patient. 3.13 Deliver pertinent, clear, concise and explicit instructions when giving orders as a resuscitation team leader. 3.14 Seek verbal confirmation from team members to ensure instructions are understood as a form of closed-loop communication.	SEP, SDL, ST	WBA, ITA, FEx

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3 continued	3.15 Provide a clinical update to other medical staff without interrupting the resuscitative efforts of the team. 3.16 Step in and out of the team leader role without disrupting the functioning of the team as required. 3.17 Lead a team debrief after a straightforward resuscitation. 3.18 Prompt team members to provide constructive feedback during a debriefing. 3.19 Communicate effectively with the healthcare team to ensure safe discharge. 3.20 Proactively access community services to aid in providing supportive care in the community. 3.21 Resolve conflict between multidisciplinary teams to ensure ongoing patient care. 3.22 Collaborate with patients and family/whānau/carers on issues of patient care beyond the immediate clinical encounter.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Actively apply teamwork strategies to maintain optimal patient care across the range of situations in the ED. 4.2 Identify gaps, anomalies and strategies to improve team processes and functions. 4.3 Intervene when suboptimal teamwork is observed in order to minimise errors in patient care. 4.4 Use immediate conflict resolution strategies to optimise teamwork. 4.5 Reflect upon overall team performance and promote processes which will support ongoing improvement. 4.6 Provide support to fellow team members during and after the patient encounter. 4.7 Provide immediate debriefing to team members when required. 4.8 Collaborate with other emergency medicine professionals for the purposes of research, clinical governance, formal debriefing and formal peer review. 4.9 Perform any resuscitation team role effectively, including team leader. 4.10 Lead resuscitation in any scenario. 4.11 Demonstrate a broad range of communication styles to confirm leadership in a resuscitation team. 4.12 Employ active listening as a resuscitation team leader. 4.13 Provide positive messages to encourage their best performance. 4.14 Support junior staff in routine team leader roles. 4.15 Lead a team debrief after a complex resuscitation. 4.16 Recognise the need for additional resources to aid in debriefing, particularly in highly emotional resuscitation scenarios. 4.17 Contribute to ongoing quality improvement as a result of a debriefing session. 4.18 Contribute to improving hospital systems to support best patient care through multidisciplinary collaboration. 4.19 Demonstrate skills to allow collaboration with clinicians outside emergency medicine for interprofessional education. 4.20 Promote collaboration with Indigenous health care workers and other cultural support staff to improve cultural safety through furthering knowledge and respect of the cultural background of patients. 4.21 Collaborate with the family/whānau/carers, the patient, and the health system to produce family/whānau-centred and patient-centred care.	SEP, SDL, ST	WBA, ITA, FEx

Leadership & Management

1. Roles and responsibilities in the emergency department

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Roles, functions, organisational structure and accountabilities of the ED and its interdepartmental links.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.2 Contribute effectively to one team role assigned by a supervisor or lead clinician. 1.3 Seek help from a senior emergency clinician to perform the team member role to guarantee best patient care. 1.4 Demonstrate self-awareness, compassion and insight into own and others' competence and confidence when performing different team roles.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Reporting lines and direct line managers. 2.2 Purpose of different roles and clinical support tasks in an ED.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.3 Take on different roles within a team during a patient encounter, and during a shift.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Effect of organisational structure on the delivery emergency health care. 3.2 Gatekeeper role of the ED with respect to patient access to the health care system. 3.3 Roles and responsibilities that represented managers perform in different types of emergency departments and services.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	3.4 Apply principles of good teamwork to ensure effective functioning as a team member. 3.5 Proactively assist junior colleagues in the assessment and management of their patients. 3.6 Demonstrate ability to alert a team leader to issues arising within the department.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Effectively use the organisational structure of the workplace to deliver emergency health care. 4.2 Identify different models of care used by difference emergency departments and services. 4.3 Encourage, assist and promote effective teamwork with any clinician who works with in the emergency setting.	SEP, SDL, ST	WBA, ITA, FEx

2. Human Resource Management

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 How and why conflict occurs and its impact on patient care. 1.2 Strategies that prevent and resolve conflict.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Recognise signs of potential conflict. 2.2 Resolve conflict that arises with another colleague with assistance of a third party. 2.3 Identify the common challenges and stresses involved when participating in shift work.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Recognise the importance of an approved process for reporting conflict incidents to a supervisor. 3.2 Evaluate methods to prevent and/or resolve conflict escalation with peer support. 3.3 Apply basic strategies to manage conflict. 3.4 Identify potential strategies to minimise and eliminate risks associated with providing a 24-hour service.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Resolve conflict between junior staff members in the workplace. 4.2 Show compassion and support junior medical staff and other colleagues to manage and resolve conflict. 4.3 Negotiate an acceptable outcome to conflict, either individually or through leading a team. 4.4 Recognise and work through conflict with other staff members, and between patients, families and staff. 4.5 Apply the principles of shift work, rolling rosters and industrial work force requirements to ensure ongoing clinical cover.	SEP, SDL, ST	WBA, ITA, FEx

3. Operational Management of the ED and the Floor

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Concept and purpose of clinical supervision. 1.2 Components of the patient journey through the ED. 1.3 Purpose of departmental key performance indicators. 1.4 Cumulative and relative costs for tests and treatments when creating patient care plans.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.5 Apply the use of triage systems in the ED to identifying patients that should be managed in the resuscitation room. 1.6 Reflect on clinical practice to ascertain required level of clinical supervision. 1.7 Reflect on clinical practice to improve the speed of processing a patient.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Departmental overcrowding and access block, and the effect of these on patient care and clinical outcomes. 2.2 Utility and application of ED information systems and its role in patient flow. 2.3 'Service gap' as it applies to the ED. 2.4 Principles of change management. 2.5 Application of cost benefit analysis when developing definitive management plans for patient care.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.6 Function efficiently in clinical teams that follow prescribed models of care. 2.7 Recognise the appropriate location within the ED for ongoing care. 2.8 Apply understanding of different types of clinical supervision to the oversight of the work of junior clinicians. 2.9 Collect data for key performance indicators. 2.10 Identify a service gap within the ED.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 The impact of ED design on the patient's journey.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	3.2 Apply the principles of triage systems, including benefits and limitations, to work in the ED. 3.3 Allocate patients according to clinical streaming principles. 3.4 Activate transfer of a patient to the resuscitation room. 3.5 Identify clinical management processes that can be used to streamline the patient's journey through the ED. 3.6 Assist junior staff on more efficient patient processing. 3.7 Activate the hospital and/or ED escalation plan when appropriate.	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
	3.8 Adopt techniques used to manage patient surges. 3.9 Identify and report an underperforming staff member. 3.10 Analyse and review data obtained for key performance indicators. 3.11 Explore possible solutions with senior staff for filling an identified service gap. 3.12 Identify area and processes where departmental function can be improved. 3.13 Demonstrate understanding of how change management can effectively manage an introduction of a new policy or process. 3.14 Create and justify cost-effective testing and treatment plans when performing patient care.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Demonstrate knowledge and understanding of:***		
	4.1 Skills required of a departmental advocate for change within a broader organisational change management project.	SEP, SDL, ST	ITA, FEx
	Be able to:		
	4.2 Manage the ED at times of patient surge. 4.3 Analyse and manage staffing allocations to improve patient flow. 4.4 Collaborate with other inpatient services to improve patient flow during patient surges. 4.5 Use data on patient flow in the ED to improve patient care. 4.6 Demonstrate a variety of supervisory strategies during a shift, including providing time-critical counselling for an underperforming junior staff member. 4.7 Make recommendations based on results obtained for key performance indicators. 4.8 Outline the cost of health care to both the consumer and the hospital. 4.9 Add elements of a business case when drafting a proposal for change.	SEP, SDL, ST	ITA, FEx

4. Leadership in the emergency department

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Principles of management and leadership and the differences between them.	SEP, SDL, ST	ITA, FEx
	Be able to:		
	1.2 Apply local media relation policies and refer enquiries appropriately.	SEP, SDL, ST	ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Emotional intelligence and how it applies to clinical practice.	SEP, SDL, ST	ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Management and leadership as these pertain to running a shift in the ED.	SEP, SDL, ST	ITA, FEx
	Be able to:		
	3.2 Apply concepts of leadership to daily clinical practice. 3.3 Apply the knowledge and skills of being a good manager to daily clinical practice. 3.4 Role model appropriate leadership behaviours to junior doctors. 3.5 Apply understanding of emotional intelligence to the management of patients and families. 3.6 Apply understanding of emotional intelligence to working in a team. 3.7 Demonstrate compassion towards self, colleagues, patients and families. 3.8 Identify clinical situations which may trigger a media enquiry and communicate this to senior clinicians.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Effectively lead the staff of an ED during a shift. 4.2 Participate in simple management tasks as directed by line manager. 4.3 Represent the ED and champion its priorities. 4.4 Role model and champion equity in the ED. 4.5 Acknowledge and understand differences between personalities of peers. 4.6 Create responses to media enquiries with the aid of standard hospital communication processes.	SEP, SDL, ST	WBA, ITA, FEx

5. Mass Casualty Incidents and Disaster Management

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 The mass casualty incident.	SEP, SDL, ST	ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Local policies for mass casualty incidents. 2.2 Impact of climate change on the provision of emergency medical care, including the effects of the following on patient presentations to ED: (a) Severe weather changes (b) Extreme heat (c) Air pollution (d) Changes in vector ecology (e) Increasing allergens (f) Water quality impacts (g) Water and food supply impacts	SEP, SDL, ST	ITA, FEx
TS3	***Be able to:***		
	3.1 Participate in hospital escalation and exercises for mass casualty incidents. 3.2 Articulate a strategy for selected use of diagnostic tests during a mass casualty or disaster event.	SEP, SDL, ST	ITA, FEx
TS4	***Demonstrate knowledge and understanding of:***		
	4.1 Occupational health and safety aspects of mass casualty incidents. 4.2 Role of clinical teams in the field during mass casualty incidents. 4.3 State and federal communication strategies during mass casualty events and public health emergencies.	SEP, SDL, ST	ITA, FEx
	Be able to:		
	4.4 Manage the ED when a disaster code is activated, in collaboration with local mass casualty incident managers. 4.5 Clearly communicate with external agencies involved in public health responses, including police, local health department and other relevant agencies. 4.6 Apply understanding of the impact of extreme weather events to the management of patients in the ED, particularly during times of patient surges.	SEP, SDL, ST	ITA, FEx

6. Patient Safety and Quality Management

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate understanding of:***		
	1.1 Quality improvement activities and measures. 1.2 Incident reporting processes in the ED, hospital and roles of external bodies in the review of significant incidents and sentinel events. 1.3 Incidents that require reporting. 1.4 Open disclosure. 1.5 Purpose of departmental morbidity and mortality reviews.	SEP, SDL, ST	ITA, FEx
	Be able to:		
	1.6 Participate in morbidity and mortality meetings. 1.7 Recognise errors in health care. 1.8 Provide feedback to the Director of emergency medicine on the operations of the ED from the perspective of a junior clinician. 1.9 Participate in collection of data for a Quality Improvement activity.	SEP, SDL, ST	ITA, FEx
TS2	***Demonstrate understanding of:***		
	2.1 Factors that contribute to a culture of safety in the ED.	SEP, SDL, ST	ITA, FEx
	Be able to:		
	2.2 Present a case at a morbidity and mortality meeting.	SEP, SDL, ST	ITA, FEx
TS3	***Demonstrate understanding of:***		
	3.1 Processes for reviewing errors and adverse events 3.2 Classification of types of reportable incidents 3.3 Types of risk reduction actions and activities 3.4 Major national clinical data registers and reporting systems in Australia and Aotearoa New Zealand	SEP, SDL, ST	ITA, FEx
	Be able to:		
	3.5 Participate in an ED quality review activity. 3.6 Independently write a workplace incident report. 3.7 Conduct a simple clinical audit. 3.8 Independently present a case at a morbidity and mortality meeting. 3.9 Implement recommendations from a morbidity and mortality meeting.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Demonstrate understanding of:***		
	4.1 Patient safety principles in the management of an ED. 4.2 Links between ED clinical governance and the provision of safe quality care in the ED. 4.3 Quality management prescribed within the ACEM Quality Standards Framework. 4.4 Processes to monitor system changes to improve patient safety and the associated accountability framework.	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS4 continued	***Be able to:***		
	4.5 Apply risk stratification and patient safety principles to the daily clinical operations in an ED. 4.6 Design clinical audits to measure the impact of ethnicity, gender and age on equity of access to care and health outcomes. 4.7 Make recommendations based on an audit analysis. 4.8 Manage the process of a departmental morbidity and mortality meeting and its application in the quality cycle. 4.9 Contribute to the implementation of system changes to improve patient care as a result of an investigation into sentinel patient care event. 4.10 Lead a team to collect data for quality assurance, clinical audit and other risk management activities. 4.11 Collate, analyse, and present audit data to peers. 4.12 Represent the ED in a hospital-wide quality improvement activity. 4.13 Instigate a review of a system error using a Root Cause Analysis approach.	SEP, SDL, ST	WBA, ITA, FEx

7. Complaints

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Demonstrate understanding of local regulations pertaining to the patient's code of rights. 1.2 Recognise the rights of patients, family/whānau members and carers to make a complaint. 1.3 Demonstrate understanding of local patient complaints procedure. 1.4 Proactively seek assistance in responding to requests for statements regarding a complaint. 1.5 Provide timely, accurate written responses to complaints, with assistance, when required.	SEP, SDL, ST	ITA, FEx
TS2	***Be able to:***		
	2.1 Identify the root cause of a patient's complaint. 2.2 Contribute to the creation of a written response to a complaint. 2.3 Field and refer a complaint to appropriate shift/department managers in real time. 2.4 Review own role in the episode that lead to the complaint and respond appropriately, with assistance.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Recognise all factors likely to lead to complaints. 3.2 Manage simple patient complaints. 3.3 Provide evidence for case reports in response to an investigation into patient care.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Apply principles of complaint management to responses to complaints in a timely manner, including the compilation of case reports in response to an investigation into patient care.	SEP, SDL, ST	WBA, ITA, FEx

Health Advocacy

1. Principles of Health Advocacy

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Socio-economic, organisation, geographical, psychological, and cultural factors that influence the likelihood of a patient accessing health care. 1.2 Differences between equity and equality as it relates to health care. 1.3 Factors that affect health literacy, and the impact of low health literacy on clinical outcomes, in particular compliance and delayed presentation to the ED. 1.4 Rationale for screening, immunisation and contact tracing.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.5 Recognise the duty of the medical professional to act as a patient advocate, and the role of health advocacy in the practice of emergency medicine. 1.6 Identify local resources available to address barriers to accessing health care. 1.7 Deliver patient-centred care for adult patients. 1.8 Deliver family/whānau-centred care for paediatric patients. 1.9 Provide basic health promotion and immunisation when requested.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Patient rights and consumer advocacy guidelines as they apply to emergency medicine, including the right to refuse or vary treatment plans.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.2 Utilise relevant allied health and patient support staff to address barriers to accessing health care. 2.3 Identify the interaction between mental, physical and social well-being in relation to health. 2.4 Opportunistically promote healthy lifestyle choices and provide simple health promotion messages to all patients. 2.5 Contribute to the creation of management plans that include health promotion for all ED patients.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Use of illness and injury data.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	3.2 Balance patient autonomy with best clinical practice. 3.3 Advocate for the elimination of inequities for patients. 3.4 Use consumer advocacy resources to advise patients on issues relating to emergency medicine.	SEP, SDL, ST	WBA, ITA, FEx

Training Stages	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3 continued	3.5 Proactively identify barriers to accessing health care with patients of any age and develop tailored strategies to address these. 3.6 Create a management plan that addresses identified risk factors of disease. 3.7 Systematically develop management plans that include health promotion.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Exhibit health advocacy systematically when providing patient care. 4.2 Advocate systematically for improved access to health care in the ED and the elimination of inequities for patients. 4.3 Screen patients in a focussed manner according to knowledge about societal trends and current public health surveillance data. 4.4 Respond actively to common public health initiatives that impact on emergency medicine, including pandemics and novel infectious diseases. 4.5 Contribute to the creation of tailored management plans with a focus on complex patients with recurrent presentations.	SEP, SDL, ST	WBA, ITA, FEx

2. Cultural awareness, competence and safety

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Cultural awareness, competence and safety. 1.2 Importance of understanding one's own cultural views and recognising implicit biases and privilege. 1.3 Importance of learning about Aboriginal, Torres Strait Islander and Māori cultures. 1.4 Importance of learning about other cultures. 1.5 Diversity of languages, customs and values of patients and colleagues. 1.6 Effects of stereotyping people of other cultures. 1.7 The culture of emergency medicine and the hospital system. 1.8 Importance of culturally safe patient-centred care. 1.9 Potential power imbalance in the relationship between a doctor and their patient, and impact upon quality of care.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.10 Identify and utilise resources that are locally available for Indigenous and culturally diverse patients in the ED. 1.11 Identify and liaise with Indigenous and culturally appropriate primary health care services.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 The impact of a doctor's own cultural background upon their assessment and management of patients. 2.2 Elements of culture that impact upon the patients access to and use of emergency departments. 2.3 Influence of cultural factors on expectations regarding illness, emergency care and the health care system in general. 2.4 Cultural factors that might create conflicting priorities between patient and clinician.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.5 Reflect on own cultural identity, beliefs, values, behaviours and communication styles. 2.6 Examine own biases and prejudices that may consciously or unconsciously exist toward cultural differences and actively work towards transforming them. 2.7 Recognise the culturally diverse roles of family/whānau in decision making and service utilisation.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Impact of the ED culture on delivering patient-centred care.	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3 continued	***Be able to:***		
	3.2 Display empathy, compassion and respect towards people from other cultures. 3.3 Apply knowledge of cultural groups respectfully and without reliance on stereotypes. 3.4 Tailor emergency care to the specific cultural needs of the patient. 3.5 Compensate the power imbalances inherent in the doctor-patient relationship.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Care for patients of any cultural background without prejudice, assumptions or judgement of cultural differences and with compassion and respect to culturally-mediated priorities and choices. 4.2 Advocate for the delivery of culturally safe emergency care. 4.3 Challenge individual and systemic forms of discrimination within the ED and health care service. 4.4 Advocate for the provision of appropriate resources for culturally diverse patients with the ED, hospital and community.	SEP, SDL, ST	WBA, ITA, FEx

3. Advocacy for Vulnerable Patients

Vulnerable patients includes patients who are vulnerable due to factors such as age, impairment or disability, poor health literacy, living arrangements, and adverse social determinants of health including LGBTQI+.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Principles of health screening, including the risk factors for common illnesses and injuries, addiction, abuse, neglect and violence.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.2 Recognise patients who are vulnerable due to factors such as age, impairment and/or disability, poor health literacy, exposure to adverse social determinants of health. 1.3 Recognise vulnerable patients and the factors that lead patients to use the ED as their primary method of accessing health care. 1.4 Recognise the need for more complex management plans for vulnerable patients, and the support required to develop these.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Be able to:***		
	2.1 Routinely screen for recognised risk factors, including addiction, abuse, neglect and violence, in patients presenting with common illnesses and injuries. 2.2 Initiate emergency care, advice and referral for patients in whom screening identifies risk factors. 2.3 Identify and utilise resources that are locally available for vulnerable patients in the ED. 2.4 The social, historical, ethical and political contexts relevant to the delivery of health services for clients with substance use disorders	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Tailor emergency care and disposition decisions to account for the presence of vulnerability factors in patients of any age. 3.2 Integrate emergency care with the involvement of appropriate support services to provide holistic care to a vulnerable patient. 3.3 Apply additional management strategies when patients are identified with extra vulnerability risk factors.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Advocate for the provision of appropriate resources for vulnerable patients within the ED, hospital and community.	SEP, SDL, ST	WBA, ITA, FEx

4. Indigenous health

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Diversity of ways that Indigenous peoples self-identify. 1.2 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. 1.3 ACEM's Reconciliation Action Plan and Te Rautaki Manaaki Mana: Excellence in Emergency Care for Māori.	SEP, SDL, ST, eLM	WBA, ITA, FEx
	Be able to:		
	1.4 Recognise an Indigenous person as someone who identifies themselves as Indigenous and is accepted as Indigenous by their community. 1.5 Recognise the regional diversity of Indigenous language, cultures and customs. 1.6 Recognise, respect and utilise resources that are locally available for Indigenous patients, including Indigenous liaison officers and local Indigenous primary health care services. 1.7 Recognise the health disparities commonly experienced by the Indigenous populations of Australia and Aotearoa New Zealand.	SEP, SDL, ST, eLM	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Common characteristics of Indigenous populations, including self-identification as a distinct cultural group, historical continuity with pre-colonial societies, nature of kinship in Indigenous communities, strong links to ancestral territories and non-dominant status in Australia and Aotearoa New Zealand. 2.2 Importance of working with patients' families, including appreciating variations in roles and responsibilities in relation to health. 2.3 Social and political history of the Indigenous populations of Australia and Aotearoa New Zealand, and their impact on Indigenous access to, perceptions and use of emergency care. 2.4 Indigenous peoples' concepts of health and wellness, and the role of Indigenous traditional healing practices and medicines. 2.5 Prevalence of chronic disease in Indigenous populations and the effects of increased disease burden on Indigenous communicates. 2.6 The role of culturally safe community health services in providing timely and appropriate follow-up. 2.7 Application of the Section 100 and Close the Gap scheme for pharmaceutical access for Aboriginal and Torres Strait Islander patients. 2.8 Challenges of interpreting biomedical terminology into Indigenous languages.	SEP, SDL, ST, eLM	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Socio-economic and colonial context that contributes to health disparities within Indigenous populations. 3.2 Perceptions of waiting times in Indigenous communities, and the prevalence and reasons for Take Own Leave.	SEP, SDL, ST, eLM	WBA, ITA, FEx
	Be able to:		
	3.3 Incorporate knowledge of medical conditions known to affect local Indigenous populations disproportionately when formulating a diagnosis for an Indigenous patient. 3.4 Integrate emergency care with the involvement of appropriate Indigenous hospital and local community support services to provide holistic care for an Indigenous patient. 3.5 Recognise patients at risk of Take Own Leave, and utilise strategies to minimise Take Own Leave, including effectively negotiating a patient-accepted management plan.	SEP, SDL, ST, eLM	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Incorporate ACEM's Reconciliation Action Plan and Te Rautaki Manaaki Mana: Excellence in Emergency Care for Māori into practice. 4.2 Advocate for and support the provision of appropriate resources for Indigenous patients in the ED, hospital and community. 4.3 Support sustained relationship with external organisations to improve the delivery of health care to Indigenous patients.	SEP, SDL, ST, eLM	WBA, ITA, FEx

5. Refugee health

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Situations that may lead people to seek asylum or refugee status in Australia and Aotearoa New Zealand. 1.1 Cultural, experiential and political factors that impact on refugee, asylum seeker and migrant access to, perceptions and use of emergency care. 1.2 Prevalence of Female Genital Mutilation and its impact on women's gynaecological health.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Health disparities commonly experienced by people who seek asylum or refugee status. 2.2 Impact of trauma and torture on the ongoing psychological and physical health of refugees and asylum seekers and the consequences for ED care. 2.3 Context of pre-arrival health care and health issues relevant to ED of newly arrived migrants, refugees and asylum seekers.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.4 Enquire sensitively about refugee status, including experiences of trauma or torture, as appropriate to a patient's emergency problem. 2.5 Sensitively manage and refer patients with ongoing psychological and physical sequelae from torture and trauma. 2.6 Instigate management and appropriate referral for newly arrived migrant and refugee patients presenting with common health complaints.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Be able to:***		
	3.1 Apply understanding of medical conditions known to affect refugee populations disproportionately when formulating a diagnosis for a refugee patient. 3.2 Integrate emergency care with the involvement of appropriate refugee support services to provide holistic and compassionate care for a refugee patient.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Promote and sustain relationships with external organisations to improve the delivery of health care to refugee and asylum seeker patients.	SEP, SDL, ST	WBA, ITA, FEx

6. End of Life Care

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Culturally diverse patients' understanding of palliative care, including experience of pain and pain management, and cultural factors and beliefs that impact upon end-of-life decision making. 1.2 Diversity of cultural expressions of grief and important cultural rituals and protocols following a death in the ED. 1.3 Circumstances that may lead to a dying patient being managed in the ED. 1.4 The ED not being the ideal environment in which to manage a dying patient.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.5 Demonstrate compassion towards patients and their family/whānau and/or carers when discussing and providing end of life care. 1.6 Locate existing previous information about a patient's functional status and their expressed goals and wishes regarding medical treatment. 1.7 Document end of life decisions clearly in the medical record. 1.8 Advocate for the provision of an appropriate environment for a patient who is dying in the ED. 1.9 Identify a patient as a potential organ donor according to recognised medical criteria.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Medically non-beneficial treatment. 2.2 Clinical situations where end of life care must be discussed.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	2.3 Initiate discussion in the ED with a patient and their family/whānau and/or carers about their values, goals and wishes regarding medical treatment. 2.4 Advocate for a patient by initiating discussion regarding end of life care with inpatient clinicians and community health professionals. 2.5 Identify and utilise resources that are locally available for a patient who is dying in the ED. 2.6 Work effectively with Indigenous and other culturally diverse families following the death of a patient in the ED, taking into consideration relevant cultural factors. 2.7 Notify the organ donation service and inpatient critical care clinicians appropriately.	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3	***Be able to:***		
	3.1 Assess the impact of an acute illness or injury on the chronic state of a patient and identify where the goals of emergency care should become palliative. 3.2 Record discussions and decisions about end of life care clearly in the medical record. 3.3 Advocate by communicating the expressed wishes of a patient and their family/whānau and/or carers regarding medical treatment to the inpatient clinicians. 3.4 Complete the required notifications and documentation after a death in the ED. 3.5 Take responsibility for ceasing resuscitation appropriately in a simple presentation. 3.6 Manage dyspnoea and pain in the dying patient. 3.7 Facilitate the provision of cultural and spiritual support to the dying patient and their family/whānau/carers.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Be able to:***		
	4.1 Recognise resuscitation presentations where ongoing resuscitation may be non-beneficial. 4.2 Limit monitoring and investigations appropriate where the goals of emergency care are palliative. 4.3 Explain the decisions regarding medical management and the goals of end of life care to a patient and their family/whānau and/or carers. 4.4 Lead the discussion with patients and their family/whānau and/or carers regarding the medical decisions and goals for end of life care. 4.5 Advocate by liaising with inpatient clinicians and community health professionals to promote holistic end of life care. 4.6 Take responsibility for ceasing resuscitation appropriately in a complex presentation. 4.7 Decide on appropriate goals of care and limitation of medical treatment for a dying patient. 4.8 Deliver appropriate end of care palliative care to a patient who is dying in the ED. 4.9 Sensitively elicit patient and carer wishes regarding organ donation where appropriate in the ED.	SEP, SDL, ST	WBA, ITA, FEx

Scholarship & Teaching

1. Critically Appraising and Applying the Evidence

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 The role and limitations of evidence-based medicine as it applies to emergency medicine practice.	SEP, SDL, ST	ITA, RR, FEx
	Be able to:		
	1.2 Locate academic medical information in an educational environment. 1.3 Locate written and electronic medical information in the workplace to inform emergency medicine practice. 1.4 Locate, integrate and modify as required local and regional guidelines to patient care plans for emergency medicine presentations. 1.5 Integrate academic reading with sentinel workplace events to improve their emergency medicine practice.	SEP, SDL, ST	WBA, ITA, RR, FEx
TS2	***Be able to:***		
	2.1 Select appropriate medical information that could inform emergency medicine practice. 2.2 Critically appraise the evidence that informed published standards, guidelines, or core clinical protocols for applicability to local emergency medicine practice. 2.3 Critically appraise a published article with quantitative and qualitative data to address a clinical question, with the support of a template. 2.4 Assess the validity of a study, taking into consideration potential confounders and biases. 2.5 Assess the significance of the results of a study, taking into account its magnitude and applicability to patients under consideration. 2.6 Describe the role of publication bias in influencing literature published in the emergency medicine context. 2.7 Modify the application of standard clinical guidelines to a patient's presentation, with the aid of senior medical staff.	SEP, SDL, ST	WBA, ITA, RR, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Clinical relevance of a published article as applied to emergency medicine practice. 3.2 Design concepts which enhance or detract from the relevance of published literature as applied to emergency medicine.	SEP, SDL, ST	WBA, ITA, RR, FEx
	Be able to:		
	3.3 Independently search for information to perform a limited literature review to define and justify standards of clinical practice. 3.4 Locate appropriate published literature to support clinical decisions. 3.5 Evaluate quoted quantitative statistical results to validate findings in a published clinical article. 3.6 Critically appraise, without the use of a template, a published article with quantitative data.	SEP, SDL, ST	WBA, ITA, RR, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3 continued	3.7 Critically appraise and compare clinical guidelines in the context of emergency medicine. 3.8 Modify application of standard clinical guidelines after incorporating critically appraised, newly published research and according to the patient's presentation. 3.9 Evaluate a broad range of academic reading, including newly published research, to improve their emergency medicine practice with the aid of senior medical staff. 3.10 Highlight deficiencies in research study results that suggest further scholarly enquiry is warranted.	SEP, SDL, ST	WBA, ITA, RR, FEx
TS4	***Be able to:***		
	4.1 Regularly search for a range of literature relevant to emergency medicine. 4.2 Review the results acquired from a literature review for effectiveness and relevance in local emergency medicine practice. 4.3 Critically appraise a published article with qualitative data, with the use of a template, by assessing the validity of a study, potential confounders and biases 4.4 Critically appraise the evidence that informed a published standard or guideline for applicability to local emergency medicine practice. 4.5 Combine critically appraised literature and local expert practice to amend a local clinical guideline or protocol. 4.6 Participate in the evaluation and revision of clinical protocols and guidelines as applied to emergency medicine practice. 4.7 Systematically integrate broad academic reading with self-reflection to improve their emergency medicine practice.	SEP, SDL, ST	WBA, ITA, RR, FEx

2. Research Methodology

Demonstrate knowledge of research methodology and apply this to evidence-based practice of emergency medicine.

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Role of research in maintaining and advancing clinical best practice in emergency medicine. 1.2 Referencing standards applied to academic literature.	SDL	RR FEx WBA
	Be able to:		
	1.3 Identify areas of practice where research is merited. 1.4 Determine appropriate research question in a range of contexts appropriate for emergency medicine. 1.5 Identify potential research participants and demonstrate a willingness to recruit patients for active research studies. 1.6 Apply ethics and participation management principles and adhere to local regulations in recruitment of participants into research studies.	SDL	RR FEx WBA
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 The role of ethics submission and approval in the creation of clinical research in an emergency medicine context. 2.2 The role of informed consent in the recruitment of participants for clinical research.	SDL	RR FEx WBA
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Common statistical terms, summary statistics and statistical tests used for data analysis, including sensitivity, specificity, positive predictive value, negative predictive value, accuracy, relative risk, odds ratio and other likelihood ratios, confidence intervals, number needed to treat, statistical significance, mean, median, standard deviation, pre- and post-test probability. 3.2 Statistical tests, including ANOVA, t-tests, Mann Witney U test, chi squared test. 3.3 Measurements of disease frequency and association, including: (a) Prevalence, incidence, cumulative incidence (b) Incidence rates, age-specific rates 3.4 Various research methodologies and levels of evidence, including: (a) Experimental (b) Observational (c) Meta-analysis (d) Case series and reports (e) Literature reviews (f) Multi-centre trials (g) Quantitative vs qualitative vs quasi-qualitative 3.5 Basic principles of medical research design, including sample size, randomisation and blinding, bias, validity, hypothesis formulation, superiority study, non-inferiority study. 3.6 Principles of participation management in research studies conducted in the workplace.	SDL	RR FEx WBA

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3 continued	***Be able to:***		
	3.7 Combine critically appraised literature and local expert practice in the evaluation of local clinical guidelines. 3.8 Match research methodology to question appropriate across the breadth of emergency medicine practice. 3.9 Appropriately analyse and critique research design. 3.10 Apply the principles of privacy, confidentiality, ethics, consent and disclosure of information to a clinical research project conducted in an emergency medicine context.	SDL	RR FEx WBA
TS4	***Be able to:***		
	4.1 Write about a clinical topic or practice in simple academic style. 4.2 Apply the principles of research and referencing to write an evidence-based article. 4.3 Advocate for appropriate clinical research to be conducted in emergency departments.	SDL	RR FEx WBA

3. Learning in Emergency Medicine

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Develop and document a personalised education plan, in consultation with an allocated supervisor, to maintain consistent and continual development of knowledge and skills. 1.2 Identify learning points arising from seeing patients in the ED. 1.3 Utilise learning activities and resources aligned to own learning style to optimise learning and improve clinical practice. 1.4 Regularly participate in performance review to demonstrate self-reflection and focus future learning. 1.5 Actively seek and act on formal and informal feedback from experienced colleagues, including feedback received from workplace-based assessments, asking question to clarify relevant points. 1.6 Utilise feedback from assessment to enhance self-assessment and focus future learning. 1.7 Utilise the available range of patient presentations in the ED as an opportunity to increase clinical experience and learning. 1.8 Apply understanding of benefits and limitations of simulation medicine to the use of this to develop emergency medicine skills.	SDL, ST	ITA, FEx
TS2	***Be able to:***		
	2.1 Identify and prioritise strengths and weaknesses in current level of practice by conducting regular needs analyses. 2.2 Utilise ward rounds to observe and learn from the skills of senior clinicians, or to obtain feedback on own performance. 2.3 Integrate knowledge and skills gained from supervisors to improve clinical expertise. 2.4 Identify key communication principles for delivering effective immediate and formal feedback. 2.5 Utilise simulation medicine to enhance the development of teamwork, communication skills and maintaining patient safety.	SDL, ST	ITA, FEx
TS3	***Be able to:***		
	3.1 Independently develop a learning plan to complete emergency medicine training. 3.2 Apply other learning styles to enhance study of emergency medicine. 3.3 Evaluate and reflect on significant personal clinical experiences to develop new knowledge and skill in emergency medicine. 3.4 Identify learning points from any experiences during a shift that will enhance emergency medicine practice. 3.5 Integrate learning points arising from all patients seen during the shift. 3.6 Actively seek opportunities to improve practice through workplace-based assessments.	SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS4	***Be able to:***		
	4.1 Independently develop a learning plan to facilitate continuing professional development. 4.2 Identify cases that could be used as teaching and learning opportunities. 4.3 Demonstrate the ability to participate in simulation of any fidelity as if in clinical practice. 4.4 Routinely critically appraise own total practice through self-reflection and self-assessment to demonstrate growth as a professional emergency medicine Physician.	SDL, ST	ITA, FEx

4. Teaching in Emergency Medicine

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Identify a patient presentation as an appropriate case for teaching emergency medicine to prevocational clinicians. 1.2 Present a case or topic to a small audience as a teaching activity for pre-vocational clinicians, utilising a diverse range of visual, auditory and electronic aids to facilitate learning. 1.3 Facilitate bed-side teaching to prevocational clinicians. 1.4 Deliver bed-side teaching of basic procedural skills to prevocational clinicians, while maintaining awareness of and sensitivity to the patient. 1.5 Describe good features of observed constructive feedback when delivered by senior colleagues. 1.6 Deliver positive feedback to colleagues to reinforce good emergency medicine practice. 1.7 Demonstrate understanding of the purpose and components of formal appraisal.	SDL, ST	ITA, FEx
TS2	***Be able to:***		
	2.1 Integrate basic principles of adult learning to proficiently deliver a teaching session to a small audience. 2.2 Engage in opportunistic bed-side teaching whenever the potential arises, as appropriate. 2.3 Apply a structured approach to deliver constructive feedback to junior medical staff about emergency medicine practice. 2.4 Contribute information, when requested, for a formal appraisal of junior staff.	SDL, ST	ITA, FEx
TS3	***Be able to:***		
	3.1 Appropriately match a teaching method to the audience and subject matter. 3.2 Integrate basic adult learning principles to enhance the delivery of clinical bed-side teaching. 3.3 Deliver constructive feedback to junior medical staff and peers. 3.4 Advise which domains need to be addressed in a formal appraisal process for junior staff and associated strategies.	SDL, ST	ITA, FEx
TS4	***Be able to:***		
	4.1 Lead a case presentation and follow-up discussion with fellow clinicians. 4.2 Effectively teach procedural skills and the use of equipment. 4.3 Integrate simulation aids when delivering teaching as appropriate. 4.4 Proactively utilise identified teaching opportunities in the ED. 4.5 Deliver appropriately timed feedback to members of the ED team based on opportunities arising in the ED. 4.6 Perform a formal appraisal of a junior clinician.	SDL, ST	ITA, FEx

Professionalism

1. Professional Conduct and its Regulation

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Be able to:***		
	1.1 Identify the key skills and attributes associated with the professional conduct of medical staff. 1.2 Behave professionally when performing clinical duties. 1.3 Maintain registrations with appropriate medical regulatory agencies and professional organisations. 1.4 Adhere to College and professional standards as an emergency medicine clinician including the demonstration of knowledge of ACEM training policies and regulations, and the organisational and management skills needed to meet all training program requirements.	SDL, ST	ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Role and function of national medical regulatory agencies and professional organisations.	SDL, ST	ITA, FEx
	Be able to:		
	2.2 Apply professional codes of conduct to other duties and research performed in emergency medicine. 2.3 Behave professionally performing all duties within emergency medicine. 2.4 Represent self and colleagues as professional emergency medicine clinicians to the general public.	SDL, ST	ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Principles of managing professional misconduct.	SDL, ST	ITA, FEx
	Be able to:		
	3.2 Apply professional codes of conduct to examples of behaviour observed in the workplace. 3.3 Identify and refer incidents of misconduct to senior medical staff.	SDL, ST	ITA, FEx
TS4	***Demonstrate knowledge and understanding of:***		
	4.1 Role and function of medical regulatory agencies in addressing misconduct.	SDL, ST	ITA, FEx
	Be able to:		
	4.2 Proactively support and encourage colleagues to comply with medical regulations. 4.3 Maintain competence and current practice. 4.4 Provide clear and effective information about the role of emergency medicine to the general public. 4.5 Provide society with a positive perception of emergency medicine clinicians through own professional behaviour.	SDL, ST	ITA, FEx

2. Ethics and Medicolegal Frameworks in Emergency Medicine

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Principles of valid informed consent, presumed consent, and capacity to make informed decisions. 1.2 National codes of ethics. 1.3 Obligations and principles of legal documents of national significance to emergency medicine, such as Te Tiriti O Waitangi,	SDL, ST	WBA, ITA, FEx
	Be able to:		
	1.4 Adhere to applicable ethical and medico-legal frameworks in emergency medicine practice. 1.5 Obtain informed consent from patients for simple interventions. 1.6 Identify patients with limited or no capacity to make informed decision about their medical treatment. 1.7 Complete mandatory reporting requirements in simple situations. 1.8 Write medico-legal reports on patients, with assistance. 1.9 Seek advice from senior medical staff to resolve ethical dilemmas. 1.10 Demonstrate understanding of the purpose and format of a police or coronial report. 1.11 Present evidence in court after pre-review by senior clinicians. 1.12 Identify mandatory reporting requirements for emergency medicine. 1.13 Provide equitable, non-discriminatory and compassionate care to all patients. 1.14 Apply principles of patient confidentiality to practice and documentation.	SEP, SDL, ST	WBA, ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Application of medico-legal frameworks to: (a) Duty of care (b) Competency (c) Mental health (d) Child protection (e) Notifiable diseases (f) Occupational health and safety 2.2 Ethical principles in emergency medicine practice, including: (a) Autonomy (b) Beneficence (c) Non-Maleficence (d) Distributive Justice (e) Futility (f) Dignity (g) Honesty	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS2 continued	***Be able to:***		
	2.3 Obtain informed consent from patients for complex interventions. 2.4 Recognise situations in which the use of presumed consent is appropriate. 2.5 Write a medico-legal report autonomously and submit it for review. 2.6 Complete accurate police statements. 2.7 Identify situations in which principles of confidentiality may differ across cultural groups. 2.8 Recognise situations that put patient confidentiality at risk and act to prevent loss of confidentiality.	SEP, SDL, ST	WBA, ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Medico-legal Acts that govern clinical emergency medicine practice. 3.2 Application of medico-legal frameworks to life-threatening situations and death, guardianship and medical power of attorney, and consent to treatment. 3.3 Processes for the collection and maintenance of forensic evidence.	SEP, SDL, ST	WBA, ITA, FEx
	Be able to:		
	3.4 Obtain informed consent from patients for life-saving procedures in critical situations. 3.5 Recognise situations in which the provision of treatment without the informed consent of the patient, next of kin, person responsible or legal guardian is appropriate. 3.6 Create an accurate notification report to the coroner. 3.7 Identify conflicts of interest in emergency medicine practice. 3.8 Recognise and act upon complex ethical dilemmas arising at work. 3.9 Recognise situations when it is necessary to breach patient confidentiality and act accordingly. 3.10 Recognise situations in which the complexities of patient-centred care may require external ethical or legal opinion.	SEP, SDL, ST	WBA, ITA, FEx
TS4	***Demonstrate knowledge and understanding of:***		
	4.1 Legal and ethical obligations of clinicians when caring for a patient without the capacity to make informed decisions. 4.2 Application of medico-legal frameworks to natural justice and procedural fairness in relation to patient complaints and clinical supervision. 4.3 Processes for coronial and government reviews, in cases of individual patients and in the event of a disaster or mass casualty incident. 4.4 Ethical and legal principles of sharing clinical information with colleagues.	SEP, SDL, ST	WBA, ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS4 continued	***Be able to:***		
	4.5 Obtain informed consent from patients for complex and high-risk interventions. 4.6 Provide care for patients without the capacity to make informed decisions. 4.7 Identify and communicate with the correct person for decision making when caring for a patient without the capacity to make informed decisions.	SEP, SDL, ST	WBA, ITA, FEx
	4.8 Critique examples of medico-legal reports and revise as needed. 4.9 Present a summary of recommendations from medico-legal reports to a forum of peers to identify potential improvements in service delivery. 4.10 Complete mandatory reporting requirements in any circumstances. 4.11 Appropriately manage conflicts of interest in emergency medicine practice. 4.12 Balance ethics, culture, patient autonomy and clinical needs to create optimal patient care. 4.13 Communicate with team members to clarify and move forward from complex ethical dilemmas arising from conflicting professionalism and clinical judgements. 4.14 Apply strategies to address risk factors in patient confidentiality. 4.15 Justify resolution of conflicts between legal and ethical care, evidence-based medicine and presumed best practice in delivering patient care.	SEP, SDL, ST	WBA, ITA, FEx

3. Responsibility to Profession and Self

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS1	***Demonstrate knowledge and understanding of:***		
	1.1 Burnout and stress, and factors in the practice of emergency medicine that may contribute to these. 1.2 Role of ACEM in training and regulating emergency medicine.	SEP, SDL, ST	ITA, FEx
	Be able to:		
	1.3 Address own learning needs through the support of a mentor. 1.4 Provide appropriate support and assistance to peers, supporting others to grow and develop, and offer feedback in an appropriate manner. 1.5 Build and maintain supportive professional relationships. 1.6 Modify clinical practice and self-care behaviours as a result of feedback received. 1.7 Recognise own responses to experiences in the ED, such as situations of violence, abuse, illness, suffering and trauma. 1.8 Recognise the challenges of working with diverse and vulnerable patients in emergency contexts. 1.9 Proactively seek assistance from mentors, peers and senior staff to prioritise and organise an appropriate work-life balance.	SEP, SDL, ST	ITA, FEx
TS2	***Demonstrate knowledge and understanding of:***		
	2.1 Principles of effective mentoring to support the ongoing performance of medical colleagues.	SEP, SDL, ST	ITA, FEx
	Be able to:		
	2.2 Engage in peer mentoring relationships in order to develop own and others' practice. 2.3 Recognise situations where professional relationships may be compromised. 2.4 Utilise basic strategies to aid in the maintenance of professional relationships in more challenging situations. 2.5 Use guided reflection to analyse own clinical practice, conduct and attitude. 2.6 Reflect, with guidance, on own responses to experiences in the ED that evoke strong emotional reactions, such as death, dying and grief. 2.7 Determine strategies to monitor emotional reactions and seek assistance when necessary. 2.8 Identify signs and symptoms of impaired ability in self and proactively seek the assistance of mentors, senior staff, or support personnel as appropriate. 2.9 Identify opportunities to participate in ACEM activities and processes. 2.10 Reflect on work-life balance and implement protective mechanisms to maintain a balance.	SEP, SDL, ST	ITA, FEx
TS3	***Demonstrate knowledge and understanding of:***		
	3.1 Policies, procedures and support services available for medical practitioners.	SEP, SDL, ST	ITA, FEx

Training Stage	Learning outcomes	Teaching & Learning Strategies	Assessment
TS3 continued	***Be able to:***		
	3.2 Demonstrate effective mentorship techniques. 3.3 Use a range of feedback, listening and questioning techniques to constructively challenge the mentee and facilitate insight. 3.4 Provide clear and effective information about the role of emergency medicine to peers, colleagues and other medical specialities. 3.5 Independently analyse own clinical practice, conduct and attitude, and put in place corrective strategies to modify behaviour when necessary. 3.6 Proactively seek support for dealing with responses to challenging experiences. 3.7 Utilise strategies to respond to the challenges of working with vulnerable patients in emergency contexts. 3.8 Identify signs and symptoms of burnout and stress. 3.9 Identify signs and symptoms of troubled or impaired medical staff and refer to senior medical staff appropriately. 3.10 Balance contributing to ACEM activities with maintaining progression in own training and work-life balance.	SEP, SDL, ST	ITA, FEx
TS4	***Be able to:***		
	4.1 Adapt mentorship techniques in response to the mentee's needs, stage of development and situation. 4.2 Reflect, review and seek feedback on own mentoring skills in order to improve mentoring practice. 4.3 Role model and advocate for the Emergency medicine profession through own professional standards. 4.4 Utilise advanced strategies to aid in the maintenance of professional relationships in more challenging situations. 4.5 Continually analyse own standards of practice, clinical decisions and professional behaviour. 4.6 Routinely participate in continuing professional development. 4.7 Maintain awareness of own response to experiences in the ED and employ a variety of strategies for dealing with those responses. 4.8 Identify and implement strategies to assist junior staff in dealing with challenging workplace situations. 4.9 Identify and refer clinicians to disciplinary processes in relation to medical malpractice. 4.10 Provide immediate support to the impaired clinician in order to maintain patient safety. 4.11 Monitor professional competence and currency of junior medical staff. 4.12 Contribute and feed back to ACEM about its role and support to its members and the specialty of Emergency medicine. 4.13 Systematically prioritise and organise an appropriate work-life balance, integrating mechanisms to protect against burnout. 4.14 Promote values of work-life balance to mentees and junior clinicians. 4.15 Consider opportunities for diversifying future career progression.	SEP, SDL, ST	ITA, FEx

5. Rural & Regional Emergency Medicine Practice

The rural emergency medicine context, especially the reduced local availability of physical and human resources, mandate important adaptations. Care is provided by smaller teams, typically with generalist clinical capabilities, and in tight-knit communities. Distance to specialist centres and reduced inpatient services increases the time that emergency physicians at smaller hospitals are responsible for complex patients both in and beyond the emergency department. Isolated professional practice requires rural and remote emergency physicians to accurately assess their skills and scope of practise without the benefit of easily accessible peer consultation.

In addition to preparing a trainee for practice as a specialist in a rural or remote location, a trainee may benefit from rural and remote experience in three clinical situations:

1. **Clinical situations occurring predominantly in rural and remote departments.**
   An example is administering thrombolytics for acute myocardial infarction in hospitals more than 90 minutes from a percutaneous coronary intervention facility.

2. **Clinical situations occurring in most types of department, but where the approach is often different in a rural or remote location**
   An example is assessing a complex ophthalmological problem without onsite specialist assistance. Although all emergency physicians care for patients when access to vital resources is difficult or delayed, rural and remote emergency physicians manage problems where the recommended onsite resources do not exist. As these situations occur often and for many types of presentation, rural and remote emergency physicians develop decision-making processes that evaluate when less advanced diagnostic modalities are acceptable, and when patients can be observed in lieu of complex investigations. Understanding these approaches can help trainees from all emergency settings clarify their thinking about rational use of investigations, as well as help them consider obstacles faced by rural clinicians when transferring patients from rural to urban emergency departments.

3. **Clinical situations that occur in many types of department, but where a rural location provides more opportunities for independent experience and longitudinal provision of care.**
   Procedures at tertiary emergency departments may be shared between many emergency trainees or may be performed by inpatient specialty units. Junior trainees in rural departments may benefit from the smaller ratio of trainees to emergency physicians. Senior trainees may benefit from situations where they are the most senior doctor on-site, not only in the emergency department but in in-patient wards, where their emergency medicine expertise can be applied to the longitudinal provision of care to patients.

Learning outcomes	Teaching & Learning Strategies	Assessment
Demonstrate knowledge and understanding of rural and regional emergency medicine practice:		
1 The variety of contexts in which emergency medicine is practiced, including variation due to increasing remoteness and decreased hospital size.		
2 Epidemiology, as pertains to rural emergency medicine practice, including: (a) Envenomation (b) Chemical exposure in agricultural and mining industries (c) High speed road trauma and animal-related trauma (d) Zoonoses and unusual infections		
3 Relative health of rural and remote communities compared to urban communities.	SEP, ST	WBA, ITA, FEx
4 Injury prevention in rural areas, including prevention of workplace injuries in farming families.		
5 Impact of distance of patients from the hospital on patient management.		
6 Development of safe ED discharge arrangements for patients with ongoing acute medical complains.		
7 Family/whānau disruption due to hospital admission and transfer to urban centres.		

Learning outcomes	Teaching & Learning Strategies	Assessment
8 The impact of distance from specialty and subspecialty resources on: (a) Rational use of clinical investigations and observation in lieu of transport for investigation (b) Conservative treatment of problems where advance treatments of complications are not available locally **9** Options available to transfer a patient to a facility with specialist expertise, including hospital bypass, inter-hospital transport systems, and networking of regional hospitals. **10** Options available to bring expertise to the patient through telemedicine modalities and associated clinical techniques.	SEP, ST	WBA, ITA, FEx
Be able to:		
Provision of emergency clinical care in a rural setting **1** Demonstrate resourceful independent practice when working in geographic and professional isolation. **2** Demonstrate strategies to provide effective and timely clinical care when away from onsite access to specialist medical, diagnostic and allied health services. **3** Demonstrate effective reasoning when assessing risk in rural and regional settings, including balancing the risk of disease progression or need for specialty consult, with the risk of transfer. **4** Provide effective and timely clinical care when away from ready access to first-line modalities like interventional radiology and percutaneous coronary intervention. **5** Harness the resources available in the health care team, the local community and family/whānau to optimise delivery of care close to home. **6** Work flexibly in the rural hospital environment, apply emergency medicine expertise to optimisation of patient care in the emergency department and in inpatient wards. **7** Recognise the importance of and contribute to the continuity of patient care. **8** Use information and communication technology, including telemedicine, to provide medical care or facilitate access to specialised care for patients when onsite advice is not available. **9** Use information and communication technology to network and exchange information with distant colleagues.	SEP, ST	WBA, ITA, FEx
Referral and Transfer **1** Develop and utilise advanced pre-hospital medical expertise in order to provide effective sustained care for critical care patients in situations of prolonged wait for retrieval. **2** Arrange referral to distant services in collaboration with the patient and/or carer(s), considering the balance of potential benefits, harms and costs. **3** Anticipate and judiciously arrange safe patient transfer within own facility and to other facilities, considering clinical indications, available resources, service capabilities, patient preferences, transportation, geography and distance. **4** Ensure adequate prehospital and ED cover when transporting a critically ill patient. **5** Communicate effectively at a distance with consulting or receiving clinical personnel.	SEP, ST	WBA, ITA, FEx

Learning outcomes	Teaching & Learning Strategies	Assessment
Teamwork and Collaboration **1** Demonstrate abilities to promote, enhance and foster strong relationships between the emergency medicine specialist and rural generalist workforce, extended-practice nurses, and rural paramedics. **2** Work effectively as part of the rural hospital multidisciplinary team. **3** Provide direct and distant clinical support for other rural and remote health care personnel. **4** Establish a peer support network and utilise this network to debrief in times of stress **5** Identify opportunities to network and build relationships with metropolitan emergency medicine colleagues, other specialists and stakeholders to overcome the divide between rural, regional and metropolitan emergency departments, and to enhance access to equal health care for the rural and regional communities.	SEP, ST	WBA, ITA, FEx
Leadership and Management **1** Apply understanding of different models of care commonly used in rural and regional emergency departments and Emergency Services to the provision of effective emergency medical care. **2** Implement effective conflict resolution strategies in small and/or isolated teams. **3** Provide inter-professional team leadership in emergency care that includes quality assurance.	SEP, ST	WBA, ITA, FEx
Health Advocacy **1** Describe examples of how a service gap is related to gaps in the whole health system and how this affects patient care. **2** Understand the avenues for advocacy for appropriate resource allocation and utilisation in rural regional centres. **3** Encouraging rural communities to access emergency care in an early and appropriate manner. **4** Respect local community norms and values in own life and work practices, with an appreciation of community expectations and challenges, such as confidentiality in small communities. **5** Identify and acquire knowledge and skills as may be required to meet health care needs of the local population.	SEP, ST	WBA, ITA, FEx
Scholarship and Teaching **1** Identify and utilise means and resources to maintain one's own professional skills and knowledge in an isolated environment **2** Identify educational needs specific to the rural environment **3** Support junior doctors and other health care professionals for a career in rural emergency medicine **4** Develop and deliver teaching sessions tailored to a rural workforce, the rural working environment & community needs.	SEP, ST	WBA, ITA, FEx
Professionalism **1** Demonstrate well developed capacity for self-reflection and ready identification of own limitations in practice, particularly in settings of relative professional isolation.	SEP, ST	WBA, ITA, FEx

6. Recommended resources

As part of self-directed learning, trainees may access reference texts to facilitate the development of their knowledge and skills to apply to daily practice and in preparation for examinations. It is emphasised that the Primary and Fellowship Examinations are aimed at assessing trainees' knowledge of subject matter, not the capacity to memorise textbooks.

Although careful consideration of the texts available has led to the recommendation of some texts as core references for the subject, it is acknowledged that no single text 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.

6.1 Foundations of Emergency Medicine

Anatomy

- K.L. Moore, A.F. Dalley, A.M.R. Agur. *Clinically Oriented Anatomy*. Lippincott Williams & Wilkins.
- P. Abrahams, J. Spratt, M. Loukas, A.N. van Schoor. *McMinn and Abrahams' Clinical Atlas of Human Anatomy.* Mosby Ltd.
- Anatomedia, https://anatomedia.com

Pathology

- V. Kumar, A. Abbas, J. Aster. *Robbins and Cotran Pathologic Basis of Disease*. Elsevier.

Physiology

- K.E. Barrett, S.M. Barman, H.L. Brooks, J.X.-J. Yuan. *Ganong Review of Medical Physiology*. McGraw Hill.
- J.B. West, A.M. Luks. *West's Respiratory Physiology: The Essentials.* Wolters Kluwer.

Pharmacology

- B.G. Katzung, A.J. Trevor, K. *Basic and Clinical Pharmacology*. McGraw Hill.
- B. Knollman, B.A. Chabner, L. Brunton. *Goodman and Gilman's The Pharmacological Basis of Therapeutics*. McGraw Hill.

6.2 Clinical Management in Emergency Medicine

- P. Cameron, M. Little, B. Mitra, C. Deasy (eds.). T*extbook of Adult Emergency Medicine*. Elsevier.
- R.J. Dunn, M. Borland, D. O'Brien. T*he Emergency Medicine Manual*. Venom Publishing.
- J.E. Tintinalli (ed.). *Emergency Medicine: A Comprehensive Study Guide*. McGraw Hill.
- R. Hockberger, M. Gausche-Hill, R. Walls. *Rosen's Emergency Medicine: Concepts and Clinical Practice*. Elsevier.
- P. Cameron, G. Browne, B. Mitra, S. Dalziel, S. Craig. *Textbook of Paediatric Emergency Medicine*. Elsevier.
- J.R. Roberts. *Roberts and Hedges' Clinical Procedures in Emergency Medicine and Acute Care*. Elsevier.

6.3 Additional Clinical Texts

- T.C. Chan, W.J. Brady, R.A. Harrigan. E*CG in Emergency Medicine and Acute Care*. Elsevier.
- L. Murray, M. Little, O. Pascu, K.A. Hoggett. *Toxicology Handbook*. Elsevier.
- A.D. Bernsten, J.M. Handy. *Oh's Intensive Care Manual*. Elsevier.
- N.J. Talley, S. O'Connor. *Examination Medicine: A Guide to Physician Training*. Churchill Livingstone.
- G. Q. Sharieff, M McCollough. *Neonatal and Infant Emergencies*. Cambridge University Press.
- P. Croskerry, K.S. Cosby. *Patient Safety in Emergency Medicine*. LWW.

6.4 Journals

In addition to the texts listed above, the following journals regularly include articles relevant to emergency medicine.

- *Emergency Medicine Australasia*, Wiley-Blackwell, Australasia.
- *Annals of Emergency Medicine*, Elsevier, USA.
- *Journal of Emergency Medicine*, Elsevier, USA.
- *Academic Emergency Medicine*, Wiley, USA.
- *British Medical Journal*, BMJ, United Kingdom.
- *Emergency Medicine Journal*, BMJ, United Kingdom.
- *Medical Journal of Australia*, Wiley, Australia.
- *New England Journal of Medicine*, Massachusetts Medical Society, USA.
- *Circulation*, Lippincott Williams & Wilkins, USA.
- *Lancet*, Elsevier, United Kingdom.
- *Journal of Trauma*, Lippincott Williams & Wilkins, USA.

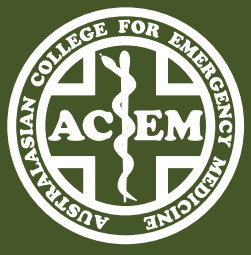
6.5 ACEM Educational Resources

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

6.6 ACEM-endorsed Standards, Statements and Guidelines

All 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: https://acem.org.au/Search-Pages/Policy-And-Regulation-Search, and include, but are not limited to, the following:

- COR235 Code of Conduct
- COR139 Conflict of Interest Policy
- S18 Statement on Responsibility for Care in Emergency Departments
- P28 Policy on a Quality Framework for Emergency Departments
- P53 Policy on the Supervision of Junior Medical Staff in the ED
- P55 Policy on the Components of an Emergency Medicine Consultation
- COR133 Discrimination, Bullying and Sexual Harassment Policy
- COR656 Procedures for Submission and Resolution of Complaint



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