

Curriculum standards

Advanced Training in Paediatric Emergency Medicine

February 2025



About this document

The new Advanced Training in Paediatric Emergency Medicine curriculum consists of curriculum standards and learning, teaching, and assessment (LTA) programs.

This document outlines the curriculum standards for Advanced Training in Paediatric Emergency Medicine for trainees and supervisors. The curriculum standards should be used in conjunction with the Advanced Training in Paediatric Emergency Medicine <u>LTA programs</u>.

The new curriculum was approved by the College Education Committee in February 2025. Please refer to the College website for details on its implementation.

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Program overview

Purpose of Advanced Training

The RACP offers Advanced Training in 33 diverse medical specialties as part of Division, Chapter, or Faculty training programs.

The purpose of Advanced Training is to develop a workforce of physicians who:

- have received breadth and depth of focused specialist training, and experience with a wide variety of health problems and contexts
- are prepared for and committed to independent expert practice, lifelong learning, and continuous improvement
- provide safe, quality health care that meets the needs of the communities of Australia and Aotearoa New Zealand.

Specialty overview

Paediatric emergency medicine (PEM) physicians are specialised in providing resuscitative or acute medical care to children who are acutely unwell or injured.

PEM physicians provide acute clinical care to children from neonates to adolescents in emergency departments of both children's hospitals and non-children's hospitals. This includes:

- acute medical care to children. PEM physicians are well rounded in all areas of acute paediatric medicine.
- resuscitation. PEM physicians lead and manage the resuscitation of acutely unwell or injured children.
- management of undifferentiated patients. PEM physicians manage undifferentiated patients presenting to an emergency department with acute illness or injury, which may include medical and surgical emergencies.
- coordinating the management of complex patients, including liaising with subspeciality teams and organising appropriate referrals.

PEM physicians provide leadership and patient-centred care with a focus on communication, decision making, teamwork, and compassion. Key professional behaviours include:

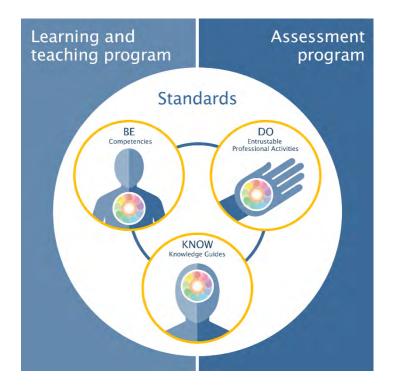
- leadership and management. PEM physicians lead multidisciplinary teams and work in close collaboration with other medical professionals.
- **communicating effectively** with other healthcare service providers.
- compassionate communication with patients, families, whānau, and/or carers. PEM physicians are compassionate and caring to children and their families, whānau, and/or carers, and possess effective communication skills, especially regarding conveying bad news and in difficult circumstances.

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- teaching other healthcare service providers, including other clinicians, nursing staff, allied health professionals, and other professional groups who work with children, particularly within the fields of emergency resuscitation and the management of severely ill or injured children.
- disaster management. PEM physicians can provide assistance as appropriate in disaster management situations
- professional and ethical practice. PEM physicians have a commitment to improving the safety, effectiveness, and experience of emergency health care.

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Advanced Training curricula standards



The RACP curriculum model is made up of curricula standards supported by learning, teaching, and assessment programs.

Learning and teaching programs

outline the strategies and methods to learn and teach curricula standards. including required and recommended learning activities.

Assessment programs outline the planned use of assessment methods to provide an overall picture of the trainee's competence over time.

The curricula standards outline the educational objectives of the training program and the standard against which trainees' abilities are measured.



Competencies outline the expected professional behaviours, values and practices of trainees in 10 domains of professional practice.



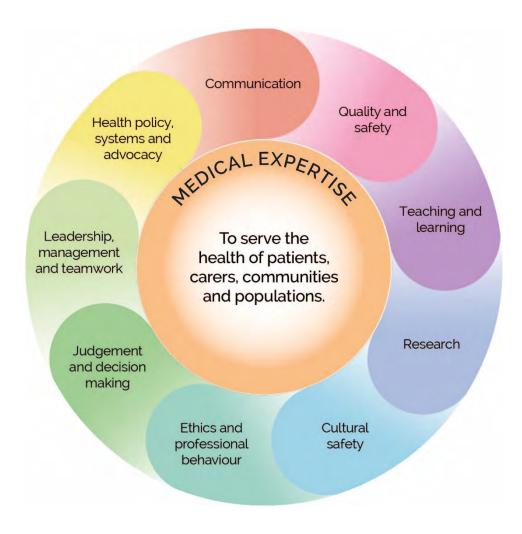
Entrustable Professional Activities (EPAs) outline the essential work tasks trainees need to be able to perform in the workplace.



Knowledge guides outline the expected baseline knowledge of trainees.

Professional Practice Framework

The Professional Practice Framework describes ten domains of practice for all physicians.



Learning, teaching, and assessment structure

The learning, teaching, and assessment structure defines the framework for delivery



Advanced Training learning, teaching, and assessment structure

- An entry decision is made before entry into the program.
- Progress decisions, based on competence, are made at the end of the specialty foundation and specialty consolidation phases of training.
- A **completion decision**, based on competence, is made at the end of the training program, resulting in eligibility for admission to Fellowship.

Advanced Training is a **hybrid time- and competency-based training program**. There is a minimum time requirement of between three to five years' full-time equivalent experience, depending on the training program undertaken. Progress and completion decisions are based on evidence of trainees' competence.

Curriculum standards

Competencies

Competencies outline the expected professional behaviours, values and practices that trainees need to achieve by the end of training.

Competencies are grouped by the 10 domains of the professional practice framework.

Competencies will be common across training programs.



Medical expertise

Professional standard: Physicians apply knowledge and skills informed by best available current evidence in the delivery of high-quality, safe practice to facilitate agreed health outcomes for individual patients and populations.

Knowledge: Apply knowledge of the scientific basis of health and disease to the diagnosis and management of patients.

Synthesis: Gather relevant data via age- and context- appropriate means to develop reasonable differential diagnoses, recognising and considering interactions and impacts of comorbidities.

Diagnosis and management: Develop diagnostic and management plans that integrate an understanding of individual patient circumstances, including psychosocial factors and specific vulnerabilities, epidemiology, and population health factors in partnership with patients, families, whānau, or carers¹, and in collaboration with the health care team.

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¹ References to patients in the remainder of this document may include their families, whānau and/or carers.

Communication



Professional standard: Physicians collate information, and share this information clearly, accurately, respectfully, responsibly, empathetically, and in a manner that is understandable.

Physicians share information responsibly with patients, families, carers, colleagues, community groups, the public, and other stakeholders to facilitate optimal health outcomes.

Effective communication: Use a range of effective and appropriate verbal, nonverbal, written and other communication techniques, including active listening.

Communication with patients, families, and carers: Use collaborative, effective, and empathetic communication with patients, families, and carers.

Communication with professionals and professional bodies: Use collaborative, respectful, and empathetic clinical communication with colleagues, other health professionals, professional bodies, and agencies.

Written communication: Document and share information about patients to optimise patient care and safety.

Privacy and confidentiality: Maintain appropriate privacy and confidentiality, and share information responsibly.

Quality and safety

Professional standard: Physicians practice in a safe, high-quality manner within the limits of their expertise.

Physicians regularly review and evaluate their own practice alongside peers and best practice standards, and conduct continuous improvement activities.

Patient safety: Demonstrate a safety focus and continuous improvement approach to own practice and health systems.

Harm prevention and management: Identify and report risks, adverse events, and errors to improve healthcare systems.

Quality improvement: Participate in quality improvement activities to improve quality of care and safety of the work environment.

Patient engagement: Enable patients to contribute to the safety of their care.

Teaching and learning

Professional standard: Physicians demonstrate a lifelong commitment to excellence in practice through continuous learning and evaluating evidence.

Physicians foster the learning of others in their profession through a commitment to mentoring, supervising, and teaching.²

Lifelong learning: Undertake effective self-education and continuing professional development.

Self-evaluation: Evaluate and reflect on gaps in own knowledge and skills to inform self-directed learning.

Supervision: Provide supervision for junior colleagues and/or team members.

Teaching: Apply appropriate educational techniques to facilitate the learning of colleagues and other health professionals.

Patient education: Apply appropriate educational techniques to promote understanding of health and disease amongst patients and populations.



Research

Professional standard: Physicians support creation, dissemination and translation of knowledge and practices applicable to health.² They do this by engaging with and critically appraising research, and applying it in policy and practice to improve the health outcomes of patients and populations.

Evidence-based practice: Critically analyse relevant literature and refer to evidence-based clinical guidelines, and apply these in daily practice.

Research: Apply research methodology to add to the body of medical knowledge and improve practice and health outcomes.

²Adapted from Richardson D, Oswald A, Chan M-K, Lang ES, Harvey BJ. Scholar. In: Frank JR, Snell L, Sherbino J, editors. The Draft CanMEDS 2015 Physician Competency Framework – Series IV. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2015 March.

Cultural safety

Professional standard: Physicians engage in iterative and critical self-reflection of their own cultural identity, power, biases, prejudices and practising behaviours. Together with the requirement of understanding the cultural rights of the community they serve; this brings awareness and accountability for the impact of the physician's own culture on decision-making and healthcare delivery. It also allows for an adaptive practice where power is shared between patients, family, whānau and/or community and the physician, to improve health outcomes.



Physicians recognise the patient and population's rights for culturally-safe care, including being an ally for patient, family, whānau and/or community autonomy and agency over their decision-making. This shift in the physician's perspective fosters collaborative and engaged therapeutic relationships, allows for strength-based (or mana-enhanced) decisions, and sharing of power with the recipient of the care, optimising health care outcomes.

Physicians critically analyse their environment to understand how colonialism, systemic racism, social determinants of health and other sources of inequity have and continue to underpin the healthcare context. Consequently, physicians then can recognise their interfacing with, and contribution to, the environment in which they work to advocate for safe, more equitable and decolonised services and create an inclusive and safe workplace for all colleagues and team members of all cultural backgrounds.3

Critical reflection. Engage in iterative and critical self-reflection and demonstrate cultural safety in the context of their own cultural identity, power, biases, prejudices and practising behaviours.

Allyship. Recognise the patient and population's rights to culturally-safe care, including being an ally for patient, family, whānau and/or community autonomy and agency over their decision-making.

Inclusive communication. Apply culturally-safe communication, acknowledging the sharing of power, and cultural and human rights to enable patients, families and whānau to engage in appropriate patient care decisions.

Culturally-safe environment. Contributes to a culturally-safe learning and practice environment for patients and team members. Respect patients may feel unsafe in the healthcare environment.

³ The RACP has adopted the Medical Council of New Zealand's definition of cultural safety (below): Cultural safety can be defined as1.

The need for doctors to examine themselves and the potential impact of their own culture on clinical interactions and healthcare service delivery.

The commitment by individual doctors to acknowledge and address any of their own biases, attitudes, assumptions, stereotypes, prejudices, structures, and characteristics that may affect the quality of care provided.

The awareness that cultural safety encompasses a critical consciousness where healthcare professionals and healthcare organisations engage in ongoing self-reflection and self-awareness and hold themselves accountable for providing culturally safe care, as defined by the patient and their communities.

^{1.} Curtis et al. "Why cultural safety rather than cultural competency is required to achieve health equity". International Journal for Equity in Health (2019) 18:174

Ethics and professional behaviour



Professional standard: Physicians' practice is founded upon ethics, and physicians always treat patients, their families, communities, and populations in a caring and respectful manner.

Physicians demonstrate their commitment and accountability to the health and wellbeing of individual patients, communities, populations, and society through ethical practice.

Physicians demonstrate high standards of personal behaviour.

Beliefs and attitudes: Reflect critically on personal beliefs and attitudes, including how these may impact on patient care.

Honesty and openness: Act honestly, including reporting accurately, and acknowledging their own errors.

Patient welfare: Prioritise patients' welfare and community benefit above self-interest.

Accountability: Be personally and socially accountable.

Personal limits: Practise within their own limits and according to ethical principles and professional guidelines.

Self-care: Implement strategies to maintain personal health and wellbeing.

Respect for peers: Recognise and respect the personal and professional integrity, roles, and contribution of peers.

Interaction with professionals: Interact equitably, collaboratively, and respectfully with other health professionals.

Respect and sensitivity: Respect patients, maintain appropriate relationships, and behave equitably.

Privacy and confidentiality: Protect and uphold patients' rights to privacy and confidentiality.

Compassion and empathy: Demonstrate a caring attitude towards patients and endeavour to understand patients' values and beliefs.

Health needs: Understand and address patients', families', carers', and colleagues' physical and emotional health needs.

Medical and health ethics and law: Practise according to current community and professional ethical standards and legal requirements.

Judgement and decision making



Professional standard: Physicians collect and interpret information, and evaluate and synthesise evidence, to make the best possible decisions in their practice.

Physicians negotiate, implement, and review their decisions and recommendations with patients, their families and carers, and other health professionals.

Diagnostic reasoning: Apply sound diagnostic reasoning to clinical problems to make logical and safe clinical decisions.

Resource allocation: Apply judicious and cost-effective use of health resources to their practice.

Task delegation: Apply good judgement and decision making to the delegation of tasks.

Limits of practice: Recognise their own scope of practice and consult others when required.

Shared decision-making: Contribute effectively to team-based decision-making processes.

Leadership, management, and teamwork



Professional standard: Physicians recognise, respect, and aim to develop the skills of others, and engage collaboratively to achieve optimal outcomes for patients and populations.

Physicians contribute to and make decisions about policy, protocols, and resource allocation at personal, professional, organisational, and societal levels.

Physicians work effectively in diverse multidisciplinary teams and promote a safe, productive, and respectful work environment that is free from discrimination, bullying, and harassment.

Managing others: Lead teams, including setting directions, resolving conflicts, and managing individuals.

Wellbeing: Consider and work to ensure the health and safety of colleagues and other health professionals.

Leadership: Act as a role model and leader in professional practice.

Teamwork: Negotiate responsibilities within the healthcare team and function as an effective team member

Health policy, systems, and advocacy



Professional standard: Physicians apply their knowledge of the nature and attributes of local, national, and global health systems to their own practices. They identify, evaluate, and influence health determinants through local, national, and international policy.

Physicians deliver and advocate for the best health outcomes for all patients and populations.

Health needs: Respond to the health needs of the local community and the broader health needs of the people of Australia and Aotearoa New Zealand.

Prevention and promotion: Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients and their social support networks.

Equity and access: Work with patients and social support networks to address determinants of health that affect them and their access to needed health services or resources.

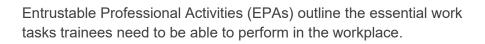
Stakeholder engagement: Involve communities and patient groups in decisions that affect them to identify priority problems and solutions.

Advocacy: Advocate for prevention, promotion, equity, and access to support patient and population health needs within and outside the clinical environment.

Resource allocation: Understand the factors influencing resource allocation, promote efficiencies, and advocate to reduce inequities.

Sustainability: Manage the use of healthcare resources responsibly in everyday practice.

Entrustable Professional Activities





#	Theme	Title
1	Team leadership	Lead a team of health professionals
2	Supervision and teaching	Supervise and teach professional colleagues
3	Patient safety and quality improvement	Individual to system-level harm prevention and provision of high-quality care
4	Emergency department management	Manage an emergency department
5	Acute illness clinical assessment and management	Assess and manage the early care of acutely unwell children
6	Acute injury clinical assessment and management	Assess and manage children with suspected acute injuries
7	Transitions, transfers, and handovers of care	Manage the transition of patient care between health professionals, providers, and contexts
8	Communication with patients and families	Communicate with children, their families, whānau, and/or carers
9	<u>Procedures</u>	Plan, prepare for, perform, and provide aftercare for important practical procedures across different settings
10	Resuscitation assessment and management	Resuscitate critically ill / injured paediatric patients
11	Acute behavioural and psychiatric presentation and management	Manage paediatric patients presenting with behavioural and/or psychological disturbances in the emergency department

EPA 1: Team leadership

Theme	Team leadership	AT-EPA-01	
Title	Lead a team of health professionals		
Description	This activity requires the ability to: prioritise workload manage multiple concurrent tasks articulate individual responsibilities, expertise, and accountability of team members understand the range of team members' skills, expertise, and roles acquire and apply leadership techniques in daily practice collaborate with and motivate team members encourage and adopt insights from team members act as a role model.		
Behaviours			
Professional practice framework domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity	
	The trainee will:	The trainee may:	
Medical expertise	 synthesise information with other disciplines to develop optimal, goal-centred plans for patients⁴ use evidence-based care to meet the needs of patients or populations assess and effectively manage clinical risk in various scenarios demonstrate clinical competence and skills by effectively supporting team members 	 demonstrate adequate knowledge of healthcare issues by interpreting complex information assess the spectrum of problems to be addressed apply medical knowledge to assess the impact and clinical outcomes of management decisions provide coordinated and quality health care for populations or patients as a member of a multidisciplinary team 	
Communication	 provide support and motivate patients or populations and health professionals by effective communication demonstrate a transparent, consultative style by engaging patients, families, carers, relevant professionals and/or the public in shared decision making work with patients, families, carers, and other health professionals to resolve conflict that may arise when planning and aligning goals 	 communicate adequately with colleagues communicate adequately with patients, families, carers, and/or the public respect the roles of team members 	

⁵ References to patients in the remainder of this document may include their families, whānau and/or carers.

	 demonstrate rapport with people at all levels by tailoring messages to different stakeholders 	
Quality and safety	 identify opportunities to improve care by participating in surveillance and monitoring of adverse events and 'near misses' identify activities within systems to reduce errors, improve patient and population safety, and implement cost-effective change place safety and quality of care first in all decision making 	 participate in audits and other activities that affect the quality and safety of patients' care participate in interdisciplinary collaboration to provide effective health services and operational change use information resources and electronic medical record technology where available
	 regularly self-evaluate personal professional practice, and implement changes based on the results actively seek feedback from supervisors and colleagues on their own performance 	 accept feedback constructively, and change behaviour in response recognise the limits of personal expertise, and involve other health professionals as needed demonstrate basic skills in facilitating colleagues' learning
Teaching and learning	 identify personal gaps in skills and knowledge, and engage in self-directed learning maintain current knowledge of new technologies, health care priorities, and changes of patients' expectations 	
	 teach competently by imparting professional knowledge manage and monitor learner progress, providing regular assessment and feedback 	
Cultural safety	 demonstrate culturally competent relationships with professional colleagues and patients demonstrate respect for diversity and difference take steps to minimise unconscious bias, including the impact of gender, religion, cultural beliefs, and socioeconomic background on decision making 	 demonstrate awareness of cultural diversity and unconscious bias work effectively and respectfully with people from different cultural backgrounds
Ethics and professional behaviour	 promote a team culture of shared accountability for decisions and outcomes encourage open discussion of ethical and clinical concerns respect differences of multidisciplinary team members understand the ethics of resource allocation by aligning optimal patients and organisational care effectively consult with stakeholders, achieving a balance 	 support ethical principles in clinical decision making maintain standards of medical practice by recognising the health interests of patients or populations as primary responsibilities respect the roles and expertise of other health professionals work effectively as a member of a team promote team values of honesty, discipline, and commitment to

	 acknowledge personal conflicts of interest and unconscious bias 	demonstrate understanding of the negative impact of workplace
	 act collaboratively to resolve behavioural incidents and conflicts such as harassment and bullying 	conflict
Judgement and decision making	 evaluate health services and clarify expectations to support systematic, transparent decision making make decisions when faced with multiple and conflicting perspectives ensure medical input to organisational decision making adopt a systematic approach to analysing information from a variety of specialties to make 	 monitor services and provide appropriate advice review new healthcare interventions and resources interpret appropriate data and evidence for decision making
	decisions that benefit health care delivery	
	 combine team members' skills and expertise in delivering patient care and/or population advice 	 understand the range of personal and other team members' skills, expertise, and roles
Leadership, management,	 develop and lead effective multidisciplinary teams by developing and implementing strategies to motivate others 	 acknowledge and respect the contribution of all health professionals involved in patients' care
and teamwork	 build effective relationships with multidisciplinary team members to achieve optimal outcomes 	 participate effectively and appropriately in multidisciplinary teams
	 ensure all members of the team are accountable for their individual practice 	 seek out and respect the perspectives of multidisciplinary team members when making decisions
	 engage in appropriate consultation with stakeholders on the delivery of health care 	 communicate with stakeholders within the organisation about health care delivery
	 advocate for the resources and support for healthcare teams to achieve organisational priorities 	 understand methods used to allocate resources to provide high-quality care
Health policy, systems, and advocacy	 influence the development of organisational policies and procedures to optimise health outcomes 	 promote the development and use of organisational policies and procedures
	 identify the determinants of health of the population, and mitigate barriers to access to care 	
	 remove self-interest from solutions to health advocacy issues 	

EPA 2: Supervision and teaching

Theme	Supervision and teaching	AT-EPA-02	
Title	Supervise and teach professional colleagues		
Description	This activity requires the ability to: provide work-based teaching in a variety of settings teach professional skills create a safe and supportive learning environment plan, deliver, and provide work-based assessments encourage learners to be self-directed and identify learning experiences supervise learners in day-to-day work, and provide feedback support learners to prepare for assessments.		
Behaviours			
Professional practice framework domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity	
	The trainee will:	The trainee may:	
Medical expertise	 combine high-quality care with high-quality teaching explain the rationale underpinning a structured approach to decision making consider the patient-centric view during consultations consider the population health effect when giving advice encourage learners to consider the rationale and appropriateness of investigation and management options 	teach learners using basic knowledge and skills	
Communication	 establish rapport and demonstrate respect for junior colleagues, medical students, and other health professionals communicate effectively when teaching, assessing, and appraising learners actively encourage a collaborative and safe learning environment with learners and other health professionals encourage learners to tailor communication as appropriate for different patients⁵, such as younger or older people, and different populations 	demonstrate accessible, supportive, and compassionate behaviour	

⁶ References to patients in the remainder of this document may include their families, whānau, and/or carers.

	 support learners to deliver clear, concise, and relevant information in both verbal and written communication 	
	 listen and convey information clearly and considerately 	
	 support learners to deliver quality care while maintaining their own wellbeing 	 observe learners to reduce risks and improve health outcomes
Quality	 apply lessons learned about patient safety by identifying and discussing risks with learners 	
and safety	 assess learners' competence, and provide timely feedback to minimise risks to care 	
	 maintain the safety of patients and organisations involved with education, and appropriately identify and action concerns 	
	 demonstrate knowledge of the principles, processes, and skills of supervision 	demonstrate basic skills in the supervision of learners
	 provide direct guidance to learners in day-to-day work 	 apply a standardised approach to teaching, assessment, and feedback without considering
	 work with learners to identify professional development and learning opportunities based on their individual learning needs 	individual learners' needsimplement teaching and learning activities that are misaligned to learning goals
	 offer feedback and role modelling 	 adopt a teaching style that
	 participate in teaching and supervision of professional development activities 	discourages learner self-directedness
Teaching	 encourage self-directed learning and assessment 	
and learning	 develop a consistent and fair approach to assessing learners 	
	 tailor feedback and assessments to learners' goals 	
	 seek feedback, and reflect on own teaching by developing goals and strategies to improve 	
	 establish and maintain effective mentoring through open dialogue 	
	 support learners to identify and attend formal and informal learning opportunities 	
	 recognise the limits of personal expertise, and involve others appropriately 	
Research	 clarify junior colleagues' research project goals and requirements, and provide feedback regarding the merits or challenges of proposed research 	 guide learners with respect to the choice of research projects ensure that the research projects planned are feasible and of suitable standards

	 monitor the progress of learners' research projects regularly, and may review research projects prior to submission 	
	 support learners to find forums to present research projects 	
	 encourage and guide learners to seek out relevant research to support practice 	
	 role model a culturally appropriate approach to teaching 	 function effectively and respectfully when working with and teaching
	 encourage learners to seek out opportunities to develop and improve their own cultural safety 	with people from different cultural backgrounds
Cultural safety	 encourage learners to consider culturally appropriate care of Aboriginal and Torres Strait Islander peoples and Māori into patients' management 	
	 consider cultural, ethical, and religious values and beliefs in teaching and learning 	
	 apply principles of ethical practice to teaching scenarios 	 demonstrate professional values, including commitment to
Ethics and professional behaviour	 act as a role model to promote professional responsibility and ethics among learners 	high-quality clinical standards, compassion, empathy, and respect • provide learners with feedback
	 respond appropriately to learners seeking professional guidance 	to improve their experiences
	 prioritise workloads and manage learners with different levels of professional knowledge or 	 provide general advice and support to learners use health data logically and
	link theory and practice when	effectively to investigate difficult diagnostic problems
	explaining professional decisionspromote joint problem solving	
Judgement and decision making	 support a learning environment that allows for independent decision making 	
	 use sound and evidence-based judgement during assessments and when giving feedback to learners 	
	 escalate concerns about learners appropriately 	
	 maintain personal and learners' effective performance and continuing professional development 	demonstrate the principles and practice of professionalism and leadership in health care
Leadership, management, and teamwork	 maintain professional, clinical, research, and/or administrative responsibilities while teaching 	 participate in mentor programs, career advice, and general counselling
	 create an inclusive environment in which learners feel part of the team 	

	•	help shape organisational culture to prioritise quality and work safety through openness, honesty, shared learning, and continued improvement		
Health policy,	•	advocate for suitable resources to provide quality supervision and maintain training standards	•	incompletely integrate public health principals into teaching and practice
systems, and advocacy	•	explain the value of health data in the care of patients or populations		
	•	support innovation in teaching and training		

EPA 3: Patient safety and quality improvement

Theme	Patient safety and quality improveme	ent AT-EPA-03	
Title	Individual to system-level harm prevention and provision of high-quality care		
Description	 This activity requires the ability to: identify and report actual and potential ('near miss') errors conduct and evaluate system quality improvement activities adhere to best practice guidelines conduct simple clinical audits present at departmental meetings participate in and present at morbidity and mortality meetings contribute to the development of policies and protocols designed to propatients⁶ and enhance health care monitor one's own practice and develop individual improvement plans review all relevant documentation and investigations before providing a holistic response. 		
Behaviours			
Professional practice framework domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity	
	The trainee will:	The trainee may:	
Mark at	 use population health outcomes to identify opportunities for improvement in delivering appropriate care review patients' or population health outcomes regularly to identify opportunities for improvement in delivering appropriate care 	 contribute to processes on identified opportunities for improvement recognise the importance of prevention and early detection in clinical practice use local guidelines to assist patient care decision making 	
Medical expertise	 promote health advocacy use standardised protocols to adhere to best practice and prevent the occurrence of wrong-site, wrong-patient procedures use available guidelines and evidence-based practice to provide high quality medical care regularly monitor personal professional performance 		
Communication	 practice shared decision making with patients, families, and carers implement the organisation's open disclosure policy 	 demonstrate awareness of the evidence for consumer engagement and its contribution to quality improvement in care 	

⁶ References to patients in the remainder of this document may include their families, whānau, and/or carers.

- support patients, their families, whānau, and/or carers to have access to, and use, easy-to-understand, high-quality information regarding their child's medical condition
- encourage patients to provide feedback and make complaints when appropriate, providing information on these processes and services
- apply knowledge of how health literacy might affect the way patients or populations gain access to, understand, and use health information
- demonstrate safety skills, including infection control, adverse event reporting, and effective clinical handover
- respond holistically to patient complaints, including investigating and reviewing all relevant documentation
- perform incident reporting in line with local procedures
- participate in organisational quality and safety activities, including morbidity and mortality reviews, clinical incident reviews, root cause analyses, and corrective action preventative action plans
- participate in systems for surveillance and monitoring misses', including reporting
- raise and appropriately report identified opportunities for
- use clinical audits and registries of data on patients' experiences and outcomes, learnings from incidents, and complaints to inform best practice in care

- demonstrate understanding of a systematic approach to improving the quality and safety of health care
- respond to patient complaints

Quality and safety

- of adverse events and 'near such events
- improvement

translate quality improvement

approaches and methods into

practice

work within organisational quality and safety systems for the delivery of clinical care

Teaching and learning

- participate in professional training in quality and safety to ensure a contemporary approach to safety system strategies
- supervise and manage the performance of junior colleagues in the delivery of high-quality, safe care
- use opportunities to learn about safety and quality theory and systems

Research

- confirm that any protocol for human research is approved by a human research ethics committee, in accordance with the national statement on ethical conduct in human research
- demonstrate understanding that patient participation in research is voluntary and based on an appropriate understanding about the purpose, methods, demands,

		risks, and potential benefits of the research
Cultural safety	 undertake professional development opportunities that address the impact of cultural bias on health outcomes 	communicate effectively with patients from culturally and linguistically diverse backgrounds
Ethics and professional behaviour	 align improvement goals with the priorities of the organisation contribute to developing and maintaining an organisational culture that enables and prioritises patients' safety and quality care 	comply with professional regulatory requirements and codes of conduct
Judgement and decision making	 use and contribute to decision-making support tools, such as guidelines, protocols, pathways, and reminders analyse and evaluate current care processes to improve care 	access information and advice from other health practitioners to identify, evaluate, and improve patients' care management
Leadership, management, and teamwork	 formulate and implement quality improvement strategies as a collaborative effort, involving all key health professionals support multidisciplinary team activities to lower patients' risk of harm, and promote interdisciplinary programs of education 	and cooperation among members of different professional teams
Health policy, systems, and advocacy	 participate in all aspects of the development, implementation, evaluation, and monitoring of governance processes participate regularly in multidisciplinary meetings where quality and safety issues are standing agenda items, and where innovative ideas and projects for improving care are actively encouraged measure, analyse, and report a set of specialty-specific process of care and outcome clinical indicators, and a set of generic safety indicators take part in the design and implementation of the organisational systems for: clinical education and training defining the scope of clinical practice performance monitoring and management safety and quality education and training 	managers about issues that affect patient care

EPA 4: Emergency department management

Theme	Emergency department management	AT-EPA-04	
Title	Manage an emergency department		
 This activity requires the ability to: lead emergency department staff effectively during shifts demonstrate oversight management of emergency department see including human resource management manage patient flow in the emergency department oversee quality improvement activities communicate with patients⁷, their families, and/or carers liaise with other health professionals and team members demonstrate problem-solving skills use crisis resource management principles appropriately, and und principles of disaster management. 		t of emergency department services, ment cy department es milies, and/or carers and team members	
Behaviours			
Professional practice framework domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity	
	The trainee will:	The trainee may:	
Medical expertise	 assist junior colleagues proactively in the assessment and management of their patients create accurate and appropriately prioritised differential lists in the clinical notes when reviewing patients update documentation in a timeframe appropriate to patients' clinical situations maintain oversight of patients in the department and their current medical condition, and how their condition or required treatment is prioritised against other patients in the department 	 demonstrate the ability to alert senior colleagues to issues arising within the department create basic differential lists and clinical notes when reviewing patients assist junior colleagues when directed in the assessment and management of their patients 	
Communication	 refer patients to colleagues using recognised handover tools help patients navigate the healthcare system to improve access to care by collaboration with other services, such as outpatient services to which they are referred, community health centres, and consumer organisations 	 meet patients' specific language and communication needs, wherever practical, facilitating the appropriate use of interpreter services and translated materials 	

⁷ References to patients in the remainder of this document may include their families, whānau, and/or carers.

	 communicate with patients who have concerns regarding the management of their condition 	
	 provide education to patients, using appropriate resources as well as directing them to appropriate follow-up care 	
Quality and safety	 practice health care that maximises patient safety be aware of issues that are mandatory to report, and how to report them demonstrate an understanding of how to manage and respond to patients' complaints adopt a systematic approach to the review and improvement of professional practice demonstrate an understanding of how to assist trainees in distress or those requiring performance management identify aspects of service provision that may be a risk to patients' safety ensure that patients are informed 	 take reasonable steps to address issues if patients' safety may be compromised demonstrate an understanding of a systematic approach to improving the quality and safety of health care participate in organisational quality and safety activities, including clinical incident reviews raise appropriate issues for review at morbidity and mortality meetings
Teaching and learning	 about fees and charges if applicable evaluate their own professional practice 	 recognise the limits of personal expertise, and involve other professionals as needed to
	 demonstrate learning behaviour and skills in educating junior colleagues maintain professional continuing education standards 	 contribute to patients' care use information technology appropriately as a resource for modern medical practice
Research	 obtain informed consent or other valid authority before involving patients in research 	 allow patients to make informed and voluntary decisions to participate in research
	 inform patients about their rights, the purpose of the research, the procedures to be undergone, and the potential risks and benefits of participation before obtaining consent 	
	 participate in quality improvement projects 	
Cultural safety	mitigate the influence of own culture and beliefs on interactions with patients and decision making	acknowledge the social, economic, cultural, and behavioural factors influencing health, at both
	 challenge individual and systemic forms of discrimination within the emergency department and healthcare service 	individual and population levels
	 adapt practice to improve patient engagement and health outcomes 	

	 advocate for the provision of appropriate resources for culturally diverse and Aboriginal and Torres Strait Islander peoples and Māori within the emergency department, hospital, and community 	
	 identify and respect the boundaries that define professional and therapeutic relationships 	 demonstrate an understanding of the responsibility to protect and advance the health and wellbeing of individuals and communities
Ethics and professional	 respect the roles and expertise of other health professionals 	 maintain the confidentiality of documentation, and store clinical
behaviour	 comply with the legal requirements of preparing and managing documentation 	 use social media in a manner consistent with ethical and legal
	 demonstrate awareness of financial and other conflicts of interest 	obligations
Judgement and	 integrate prevention, early detection, health maintenance, and chronic condition management, where relevant, into clinical practice 	 demonstrate understanding of the appropriate use of human resources, diagnostic interventions, therapeutic modalities, and health facilities
	 work to achieve optimal and cost-effective patient care that allows maximum benefit from the available resources 	 prioritise patients appropriately, balancing competing priorities
decision making	 maintain minimum safe staffing levels recommended for an emergency department 	
	 demonstrate understanding of the dynamics of patient flow through the emergency department, and factors and choke points that affect the department's ability to provide quality care 	t
	 demonstrate oversight of factors affecting patient flow through an emergency department 	 demonstrate some understanding of the challenges facing patient flow through the emergency
Leadership, management, and teamwork	 manage emergency department staffing allocations to improve patient flow 	departmentattend relevant clinical meetings regularly
	 liaise with hospital stakeholders, such as the head of department or nursing manager, to discuss strategies on improving patient flow through the department 	
	 conduct clinical encounters in a well-organised and time-efficient manner 	
	 work effectively as a member of multidisciplinary teams or other professional groups 	
	document all important discussions with colleagues	

and patients

discussions with colleagues, multidisciplinary team members,

- review discharge summaries, notes, and other communications written by junior colleagues
- support colleagues who raise concerns about patients' safety
- obtain consent for procedures on children who may be under the care of the state
- apply and document use of local mental health act policies and legal rulings when detaining children, including within a room, or with chemical or physical restraints
- maintain good relationships with health agencies and services
- apply the principles of efficient and equitable allocation of resources to meet individual, community, and national health needs
- demonstrate understanding of the role of clinical teams in the emergency department and in the field during mass casualty incidents
- manage the department when a disaster code (both internal and external) is activated
- contribute to the creation of tailored management plans, with a focus on complex patients with recurrent presentations

- demonstrate awareness of local mental health act policies and legal rulings when detaining children, including within a room, or with chemical or physical restraints
- consistently apply the principles of efficient and equitable allocation of resources to meet individual, community, and national health needs
- demonstrate desire to build good relationships with health agencies and services

Health policy, systems, and advocacy

EPA 5: Acute illness clinical assessment and management

Theme	Acute Illness clinical assessment and management AT-EPA-05				
Title	Assess and manage the early care of	f acutely unwell children			
Description	 This activity requires the ability to: recognise and manage patients⁸ with an acute illness assess the severity of illness, and initiate appropriate management recognise clinical deterioration, and respond by following the local process for escalation of care manage multiple acutely unwell patients simultaneously liaise with transport services and medical teams to ensure patients are managed in the most appropriate setting, if required. 				
Behaviours					
Professional practice framework domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity			
	The trainee will:	The trainee may:			
Medical expertise	 effectively assess, diagnose, and manage acute undifferentiated clinical presentations, as listed in the acute illness knowledge guide select investigations that ensure maximum patient safety through excluding or diagnosing critical patient issues systematically identify causes of acute deterioration in health status and levels of physical and cognitive functioning recognise immediate life-threatening conditions and critically unwell children, and respond appropriately manage escalations or transitions of care in a proactive and timely manner optimise medical management before surgical interventions 	 demonstrate an understanding of general medical principles of caring for children with undifferentiated and undiagnosed conditions recognise seriously unwell children requiring immediate care identify potential causes of current deterioration, and comply with escalation protocols facilitate initial tests to assist in diagnosis, and develop management plans for immediate treatment document information to outline the rationale for clinical decisions and action plans 			
Communication	 communicate clearly with other team members, and coordinate efforts of multidisciplinary team members facilitate early communication with patients, families, and team members to allow shared decision making 	 demonstrate communication skills to sufficiently support the function of multidisciplinary teams determine patients', family members', whānau, and/or carers' understanding of the diseases, if possible, and what they perceive as the most desirable goals of care 			

⁸ References to patients in the remainder of this document may include their families, whānau, and/or carers.

- negotiate realistic treatment goals, and determine and explain the expected prognoses and outcomes
- employ communication strategies appropriate for younger patients or those with cognitive difficulties
- explain situations to patients in a sensitive and supportive manner, avoiding jargon and confirming their understanding
- determine the level of health literacy of individual patients, and their level of understanding of agreed care decisions
- develop clear and effective discharge summaries for patients, general practitioners, community health providers, or specialist teams, with recommendations for ongoing care
- use clinical information technology systems for conducting prospective and retrospective clinical audits
- evaluate and explain the benefits and risks of clinical interventions based on individual patients' circumstances
 - analyse adverse incidents and sentinel events to identify system
- gaps using clinical indicators, and implement changes to improve patients' outcomes
- coordinate and encourage innovation, and objectively evaluate improvement initiatives for outcomes and sustainability

- evaluate the quality of processes through well-designed audits
- recognise the risks and benefits of operative interventions
- raise appropriate issues for review at morbidity and mortality meetings
- evaluate the quality and safety processes implemented within the workplace, and identify gaps in their structure

Quality and safety

- failures and contributing factors identify evidence-based practice

Teaching and learning

- demonstrate effective supervision skills and teaching methods that are adapted to the context of the training
- encourage questioning among junior colleagues and students in response to unanswered clinical questions
- seek guidance and feedback from healthcare teams to reflect on encounters and improve future patients' care
- mentor and train others to enhance team effectiveness
- provide constructive feedback to junior colleagues to contribute to improvements in individuals' skills
- coordinate and supervise junior colleagues from the emergency department and wards

Research

- select studies based on optimal trial design, freedom from bias, and precision of measurement
- specify research evidence to the needs of individual patients
- demonstrate efficient searching of literature databases to retrieve evidence
- use information from credible sources to aid in decision making

	 evaluate the value of treatments in terms of relative and absolute benefits, cost, feasibility, and potential patient harm evaluate the applicability of the results of clinical studies to the circumstances of individual patients, especially those with multiple comorbidities 	 refer to evidence-based clinical guidelines and protocols on acutely unwell patients demonstrate an understanding of the limitations of the evidence and the challenges of applying research in daily practice
Cultural safety	 negotiate health care decisions in a culturally appropriate way by considering variation in family structures, cultures, religion, or belief systems integrate culturally appropriate care of Aboriginal and Torres Strait Islander peoples and Māori into patients' management consider cultural, ethical, and religious values and beliefs in leading multidisciplinary teams 	 practise cultural safety appropriate for the community serviced proactively identify barriers to healthcare access
Ethics and professional behaviour	 develop management plans based on medical assessments of the clinical conditions and multidisciplinary assessments of functional capacity advise patients of their rights to refuse medical therapy, including life-sustaining treatment consider the consequences of delivering treatment that is deemed futile, directing to other care as appropriate facilitate interactions within multidisciplinary teams, respecting values, encouraging involvement, and engaging all participants in decision making demonstrate critical reflection on personal beliefs and attitudes, including how these may affect patient care and health care policy 	 communicate medical management plans as part of multidisciplinary plans establish, where possible, patients' wishes and preferences about care contribute to building a productive culture within teams
Judgement and decision making	 recognise the need for escalations of care, and escalate to appropriate staff or services integrate evidence related to questions of diagnosis, therapy, prognosis, risks, and cause into clinical decision making reconcile conflicting advice from other specialties, applying judgement in making clinical decisions in the presence of uncertainty use care pathways effectively, including identifying reasons for variations in care 	 involve additional staff to assist in a timely fashion when required recognise personal limitations and seek help in an appropriate way when required

Leadership, management, and teamwork	 work collaboratively with staff in the emergency department, intensive care, and other subspecialty inpatient units manage the transition of acute medical patients through their hospital journeys lead a team by providing engagement while maintaining a focus on patients' outcomes and dispositions 	 collaborate with and engage other team members, based on their roles and skills ensure appropriate multidisciplinary assessment and management encourage an environment of openness and respect to lead effective teams
Health policy, systems, and advocacy	 use a considered and rational approach to the responsible use of resources, balancing costs against outcomes prioritise patients' care based on need, and consider available resources collaborate with emergency medicine staff and other colleagues to develop policies and protocols for the investigation and management of common acute medical problems 	 demonstrate an understanding of the systems for the escalation of care for deteriorating patients demonstrate an understanding of the role of clinician leadership and advocacy in appraising and redesigning systems of care that lead to better patient outcomes

EPA 6: Acute injury clinical assessment and management

Theme	Acute injury clinical assessment and	management AT-EPA-06		
Title	Assess and manage children with su	Assess and manage children with suspected acute injuries		
Description	This activity requires the ability to: assess patients ⁹ with suspected acute injury perform primary, secondary, and tertiary surveys when assessing trauma patients order and interpret appropriate investigations provide appropriate treatments for patients with acute injuries perform relevant procedures for managing acute injuries in the emergency department manage urgent life- or limb-threatening injuries demonstrate knowledge and understanding of trauma systems, and use these when indicated provide leadership in managing trauma patients create resuscitation and treatment plans for multi-trauma patients diagnose injuries, and refer on for further specialised treatment and management as required consider the impact of injuries on patients' lives, and counsel on management strategies pre-empt and prevent potential complications of injury, and implement follow-up plans			
Behaviours	 identify potential inflicted injuries, ar 	nd manage appropriately.		
Professional practice framework domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity		
	The trainee will:	The trainee may:		
Medical expertise	 assess and examine suspected injuries accurately perform trauma primary, secondary, and tertiary surveys, using a thorough, systematic approach rationalise and arrange appropriate investigations interpret investigations provide acute treatment of injuries, including analgesia and procedural sedation options appropriate for patients' age and presentation 	 identify potential cases of inflicted / non-accidental injury, and, with guidance, perform appropriate work-ups provide basic treatment and management of common injuries recognise potential inflicted / non-accidental injuries demonstrate awareness of need for sensitivity with potential inflicted / non-accidental injuries 		

⁹ References to patients in the remainder of this document may include their families, whānau, and/or carers.

	 demonstrate knowledge of the potential risks and complications of injury and the prescribed treatments 		
	 recognise and sensitively work-up potential inflicted / non-accidental injuries 		
	 establish and communicate clear roles, responsibilities, and priorities within the trauma team 	•	communicate with patients in a developmentally and age-appropriate way when
	 effectively communicate with all members of the trauma team, and apply <u>closed-loop</u> communication where appropriate 	•	assessing and managing acute injuries communicate with families or carers, including gaining
Communication	 communicate treatment and management plans to patients, families, and/or carers, including gaining consent, and, where appropriate, engaging patients, family, and/or carers in decisions around treatment options 		consent for investigations and management as required
	 clearly document in medical records the assessment, diagnosis, treatment, and management plans for patients with acute injuries 		
	 communicate concerns for suspected inflicted injuries via appropriate local processes 		
	 use up-to-date evidence-based practice in the management of children with acute injuries 	•	follow local processes and protocols in managing children with acute injuries
Quality and safety	 check processes are in place so investigations and results are reviewed, and injuries not missed 	•	evaluate quality and safety processes in the workplace
y	 engage in local processes in reviewing and analysing multi-trauma presentations in multidisciplinary team meetings, such as trauma review meetings 		
	 actively participate in multidisciplinary practice of trauma presentation assessment and management, including simulation 	•	supervise and support junior doctors in the management of acute injuries in children, including interpretation of investigations
Teaching and learning	 where available demonstrate effective supervision and teaching of junior colleagues in the assessment and management of children with acute injuries 		
Research	 incorporate current evidence-based trauma and injury guidelines into local processes and protocols 	•	refer to evidence-based clinical guidelines and protocols on the management of trauma and injuries in children
	 consider enrolling eligible patients in approved clinical trials with informed consent 		

Cultural safety assess and manage patients with acute injuries in a culturally spropriate way integrate culturally appropriate or a community serviced appropriate for the community serviced proactively identify barriers to healthcare access for referring potential islander peoples and Maori into patients' management and professional behaviour Fichics and professional behaviour are a facilitate interactions within multidisciplinary teams, respecting values, encouraging involvement, and engaging all participants in decision making are recognise the need for escalation of care, and escalate to appropriate staff or services use appropriate guidelines, evidence sources, and decision support tools investigate acute injuries appropriately while taking multiple factors into consideration, including resources available locally, and the risks of these, including radiation and the potential need for escalation to be able to perform procedures Leadership, management, and teamwork Bead a trauma team, including multidisciplinary members internal and external to the emergency department apply crisis resource management principles when managing multi-trauma patients work collaboratively with other heapth professionals to formulate appropriate management principles when managing multi-trauma patients work collaboratively with other heapth professionals to formulate appropriate management principles when management principles when management principles when management principles and protocols for the investigation and management of common acute medical problems e collaborate with emergency medicine staff and other colleagues to develop policies					
care of Aboriginal and Torres Strait Islander peoples and Maori into patients' management Ethics and professional behaviour **Tecognise the need for escalations of care, and escalate to appropriate guidelines, evidence sources, and decision support tools investigate acute injuries appropriately while taking multiple factors into consideration, including resources available locally, and the risks of these, including radiation and the potential need for sedation to be able to perform procedures **Leadership, management, and teamwork** Leadership, management, and teamwork** **Leadership, management, and teamw	Cultural safety	•	acute injuries in a culturally	•	appropriate for the community
Ethics and professional behaviour values, encouraging involvement, and engaging all participants in decision making * recognise the need for escalations of care, and escalate to appropriate staff or services * use appropriate guidelines, evidence sources, and decision support tools * investigate acute injuries appropriately while taking multiple factors into consideration, including resources available locally, and the risks of these, including radiation and the potential need for sedation to be able to perform procedures * lead a trauma team, including multidisciplinary members internal and external to the emergency department * apply crisis resource management principles when managing multi-trauma patients * work collaboratively with other health professionals to formulate appropriate management plans, including the appropriate timing and location of these events * use a considered and rational approach to the responsible use of resources, balancing costs against outcomes * collaborate with emergency medicine staff and other colleagues to develop policies and advocacy * follow policies on mandatory reporting, such as abuse and sexual assault * advocate for paediatric emergency advocate for paediatric emergency * by the fact of colleagues and other colleagues and other colleagues and other specialties * trecognise the bounds of their expertised in a patients and how to seek assistance from other colleagues in the department or other specialities * recognise the bounds of their expertised in a patients and how to seek assistance from other colleagues in the department or other specialities * recognise the bounds of their expertise from other colleagues in the department or other specialities * lead a trauma team with supervision / support, demonstrat		•	care of Aboriginal and Torres Strait Islander peoples and Māori into	•	
and engaging all participants in decision making * recognise the need for escalations of care, and escalate to appropriate staff or services * use appropriate guidelines, evidence sources, and decision support tools * Judgement and decision making * investigate acute injuries appropriately while taking multiple factors into consideration, including resources available locally, and the risks of these, including resources available locally, and the risks of these, including resources available locally, and the repotential need for sedation to be able to perform procedures * lead a trauma team, including multidisciplinary members internal and external to the emergency department * lead a trauma team with supervision / support, demonstrating a structured approach and clear communication * apply crisis resource management plans, including the appropriate timing and location of these events * use a considered and rational approach to the responsible use of resources, balancing costs against outcomes * collaborate with emergency medicine staff and other colleagues in devolute with emergency medicine staff and other colleagues to develop policies and protocols for the investigation and management of common acute medical problems * follow policies on mandatory reporting, such as abuse and sexual assault * advocate for paediatric emergency	Ethics and	•		•	
Judgement and decision making Judgement and decision making investigate acute injuries appropriately while taking multiple factors into consideration, including resources available locally, and the risks of these, including resources available locally, and the risks of these, including resources available locally, and the risks of these, including resources available locally, and the risks of these, including redation to be able to perform procedures Leadership, management, and teamwork			and engaging all participants	•	expertise of colleagues and other
Judgement and decision making * or other specialities or other specialities support tools investigate acute injuries appropriately while taking multiple factors into consideration, including resources available locally, and the risks of these, including radiation and the potential need for sedation to be able to perform procedures * lead a trauma team, including multidisciplinary members internal and external to the emergency department and teamwork * lead a trauma team, including multidisciplinary members internal and external to the emergency department * apply crisis resource management principles when managing multi-trauma patients * work collaboratively with other health professionals to formulate appropriate management plans, including the appropriate timing and location of these events * use a considered and rational approach to the responsible use of resources, balancing costs against outcomes * collaborate with emergency medicine staff and other colleagues to develop policies and protocols for the investigation and management of common acute medical problems * follow policies on mandatory reporting, such as abuse and sexual assault * advocate for paediatric emergency * advocate for paediatric emergency * draw at trauma team with supervision / support, demonstrating a structured approach and clear communication * know and follow local processes for referring potential inflicted injuries to the appropriate services * know and follow local processes for referring potential inflicted injuries to the appropriate services * lead a trauma team with supervision / support, demonstrating a structured approach and clear communication * know and follow local processes for referring potential inflicted injuries to the appropriate services * lead a trauma team with supervision / support, demonstrating a structured approach and clear communication * know and follow local processes for referring potential inflicted injuries to the appropriate in injuries to the appropriate in injuries to the appropri		•	of care, and escalate to	•	abilities, and know when and how to seek assistance from other
Leadership, management, and teamwork	to to one of our t	•	evidence sources, and decision		
Leadership, management, and teamwork Leadership, management, and teamwork Plealth policy, systems, and advocacy Health policy, systems, and advocacy multidisciplinary members internal and external to the emergency department multidisciplinary members internal and external to the emergency department and external to the emergency department of the emergency multidisciplinary members internal and external to the emergency management plans, including the appropriate timing and location of these events use a considered and rational approach to the responsible use of resources, balancing costs against outcomes collaborate with emergency medicine staff and other colleagues to develop policies and protocols for the investigation and management of common acute medical problems follow policies on mandatory reporting, such as abuse and sexual assault advocate for paediatric emergency		•	appropriately while taking multiple factors into consideration, including resources available locally, and the risks of these, including radiation and the potential need for sedation		
management, and teamwork principles when managing multi-trauma patients work collaboratively with other health professionals to formulate appropriate management plans, including the appropriate timing and location of these events use a considered and rational approach to the responsible use of resources, balancing costs against outcomes collaborate with emergency medicine staff and other colleagues to develop policies and protocols for the investigation and management of common acute medical problems follow policies on mandatory reporting, such as abuse and sexual assault advocate for paediatric emergency		•	multidisciplinary members internal and external to the emergency	•	supervision / support, demonstrating a structured approach and clear
health professionals to formulate appropriate management plans, including the appropriate timing and location of these events • use a considered and rational approach to the responsible use of resources, balancing costs against outcomes • collaborate with emergency medicine staff and other colleagues to develop policies and protocols for the investigation and management of common acute medical problems • follow policies on mandatory reporting, such as abuse and sexual assault • advocate for paediatric emergency	management,	•	principles when managing		
approach to the responsible use of resources, balancing costs against outcomes collaborate with emergency medicine staff and other colleagues to develop policies and protocols for the investigation and management of common acute medical problems follow policies on mandatory reporting, such as abuse and sexual assault advocate for paediatric emergency for referring potential inflicted injuries to the appropriate services injuries to the appropriate services injuries to the appropriate services		•	health professionals to formulate appropriate management plans, including the appropriate timing		
medicine staff and other colleagues to develop policies and protocols for the investigation and management of common acute medical problems follow policies on mandatory reporting, such as abuse and sexual assault advocate for paediatric emergency		•	approach to the responsible use of resources, balancing costs	•	for referring potential inflicted
reporting, such as abuse and sexual assault advocate for paediatric emergency	systems, and	•	medicine staff and other colleagues to develop policies and protocols for the investigation and management of common		
		•	reporting, such as abuse and		
		•			

EPA 7: Transitions, transfers, and handovers of care

Theme	Transitions, transfers, and handovers of care AT-EPA-07						
Title	Manage the transition of patient care between health professionals, providers, and contexts						
Description	This activity requires the ability to:						
	 manage transitions of patient¹⁰ care of care between providers 	to ensure the optimal continuation					
	 identify the appropriate care provide to share patient information 						
	 exchange pertinent, contextually apprinted information 	propriate, and relevant patient					
	 perform this activity in multiple settin current environment, including amburetrieval settings 						
	 organise or perform prehospital and 	interhospital transfers					
	 appropriately accept transfer of patie 	ents into the department					
	appropriately handover patient care	to other teams or at end of shift.					
Behaviours							
Professional practice framework domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity					
	The trainee will:	The trainee may:					
	 facilitate optimal transitions of care for patients identify and manage key risks for patients during transition 	 demonstrate understanding of the details of patients' conditions, illness severity, and potential emerging issues, with appropriate actions 					
NA-di-d	 anticipate possible changes in patients' conditions, and provide recommendations on how to manage them 	 provide accurate summaries of patients' information with accurate identification of problems or issues 					
Medical expertise	 identify ideal locations and management teams, and arrange transfers required to achieve this 	identify patients who require expertise not available in the					
	 identify time-critical versus team-critical transfers of care 	emergency department, but need assistance to determine where and how to arrange this					
	 take appropriate referrals into the unit 	expertiserequire assistance with incoming					
	 provide appropriate phone and/or telehealth advice to external clinicians 	referrals and providing phone and/or telehealth advice to external clinicians					
Communication	 write relevant and detailed medical record entries, including clinical assessments and management plans 	 communicate accurately and in a timely manner to ensure effective transitions between settings, and continuity and quality of care 					

 $^{^{10}}$ References to patients in the remainder of this document may include their families, whānau, and/or carers.

	•	write comprehensive and accurate summaries of care, including discharge summaries, clinic letters, and transfer documentation initiate and maintain verbal communication with other health professionals, when required communicate with patients, families, and/or carers about transitions of care, and engage and support these parties in decision making	•	communicate clearly with clinicians and other caregivers use standardised verbal and written templates to improve the reliability of information transfers and prevent errors and omissions
	•	identify patients at risk of poor transitions of care, and mitigate this risk	•	ensure that handover is complete, or work to mitigate risks if incomplete
Quality	•	use electronic tools (where available) to securely store and transfer patient information	•	ensure all outstanding results or procedures are followed up by receiving units and clinicians
and safety	•	use consent processes, including written consent if required, for the release and exchange of information	•	keep patients' information secure, adhering to relevant legislation regarding personal information and privacy
	•	demonstrate understanding of the medicolegal context of written communications		
Teaching and learning	•	integrate clinical education in handover sessions and other transition of care meetings tailor clinical education to the level of the professional parties involved	•	take opportunities to teach junior colleagues during handover, as necessary
	•	communicate with careful consideration to health literacy, language barriers, and culture regarding patient preferences, and whether they are realistic and possible, respecting patient choices	•	include relevant information regarding patients' cultural or ethnic background in handovers, and whether an interpreter is required
Cultural safety	•	recognise the timing, location, privacy, and appropriateness of sharing information with patients, their families, whānau and/or carers		
	•	identify the appropriate family / whānau connections, and facilitate these as required		
	•	disclose and share only contextually appropriate medical and personal information	•	maintain respect for patients, families, carers, and other health professionals, including respecting
Ethics and professional behaviour	•	demonstrate understanding of the clinical, ethical, and legal rationale for information disclosure		privacy and confidentiality
	•	share information about patients' care in a manner consistent with privacy law and professional guidelines on confidentiality		

demonstrate understanding of the additional complexity related to some types of information, such as genetic information and blood-borne virus status, and seek appropriate advice about disclosure of such information interact in a collegiate and collaborative way with professional colleagues during transitions of care ensure patients' care is in the use a structured approach to most appropriate facility, setting, consider and prioritise patients' or provider Judgement and decision making recognise personal limitations and seek help in an appropriate way when required share the workload of transitions recognise factors that impact of care appropriately, including on transfers of care, and help delegation subsequent health professionals understand the issues to continue demonstrate understanding of the medical governance of patient care, and the differing roles of work to overcome the potential team members barriers to continuity of care, Leadership, appreciating the role of handovers show respect for the roles management, in overcoming these barriers and expertise of other health and teamwork professionals, and work effectively as a member of professional teams ensure that multidisciplinary teams provide the opportunity for patients' engagement and participation when appropriate contribute to processes for factor transport issues and costs managing risks, and identify to patients into arrangements strategies for improvement for transferring patients to other in transitions of care settings Health policy, systems, and engage in organisational advocacy processes to improve transitions of care, such as formal surveys

or follow-up phone calls after

hospital discharge

EPA 8: Communication with patients and families

Theme	Communication with patients and fam	ilies AT-EPA-08			
Title	Communicate with children, their fami	ilies, whānau, and/or carers			
Description	 adopt a patient-centred perspective of for cognition and disabilities use interpreters when communicating use AUSLAN or NZSL interpreters or such as digital devices, for communic and/or carers with hearing or other communication with LGBTG exercising caution around language as select suitable settings for difficult concarers and other team members through communication, negotiate may patients, families, whānau, and or can verify patients', family members' or conveyed consider the impact of patients' culture a culturally diverse manner. 	communicate effectively and build rapport with children and young people adopt a patient-centred perspective during communication, including adjusting for cognition and disabilities use interpreters when communicating with patients ¹¹ and families, if required use AUSLAN or NZSL interpreters or other appropriate communication aides, such as digital devices, for communication with patients, families, whānau, and/or carers with hearing or other communication impairments consider communication with LGBTQIA+ patients, and the importance of exercising caution around language and providing gender inclusive care select suitable settings for difficult conversations, and include family and/or carers and other team members through communication, negotiate mutually agreed management plans with patients, families, whānau, and or carers verify patients', family members' or carers' understanding of information conveyed consider the impact of patients' cultural diversity, and communicate in			
Behaviours	document conversations.				
Professional practice framework domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision The trainee will:	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity The trainee may:			
Medical expertise	 communicate to patients, families, whānau, and/or carers all aspects of their clinical management, including assessments and investigations provide the medical knowledge required to patients, families, whānau, and/or carers to enable them to make informed decisions about diagnostic, therapeutic, and management options use thorough communication, assessing for red flags or injuries that medical teaching instructs doctors to be concerned about, with patients, families, whānau, and/or carers to establish if there are any concerns for child maltreatment 	 apply knowledge of the scientific basis of health and disease when communicating with patients, families, whānau, and/or carers demonstrate an understanding of the clinical problems being discussed formulate management plans in partnership with patients 			

¹¹ References to patients in the remainder of this document may include their families, whānau, and/or carers.

- anticipate and be able to correct any misunderstandings patients may have about their conditions and/or risk factors
- use appropriate communication strategies and modalities for communicating with patients, families, whānau, and/or carers
- elicit patients' views, concerns, and preferences, promoting rapport
- provide information to patients in plain language, avoiding jargon, acronyms, and complex medical terms
- encourage questions, and answer them thoroughly
- ask patients to share their thoughts or explain their management plans in their own words, to verify understanding
- convey information considerately and sensitively to patients, seeking clarification if unsure of how best to proceed
- communicate with children at a developmentally and age-appropriate level and manner
- Incorporate appropriate LGBTQIA+ safe language, including gender affirming language use an appropriate manner and recommended tools when communicating with adolescents
- communicate with patients individually, as well as with their families, whānau, and/or carers, to encourage patient autonomy, decision making, and preparation for adulthood
- communicate with patients in their preferred manner, including the use of pronouns
- treat children and young people respectfully, and listen to their views
- assess that the information communicated to patients, families, whānau, and/or carers has been understood
- provide gender inclusive care and promotion of equality to patients accessing care (for example, some patients may be apprehensive about accessing care)

- select appropriate modes of communication
- engage patients in discussions, avoiding the use of jargon
- check patients' understanding of information
- adapt communication style in response to patients' age, developmental level, and cognitive, physical, cultural, socioeconomic, and situational factors
- use culturally safe interpreters, if required, when communicating with patients, families, whānau, and/or carers
- collaborate with patient liaison officers as required
- ensure all conversations with patients, families, whānau, carers, and other clinicians are well documented

Communication

Quality and safety	 discuss with patients their condition and the available management options, including potential benefits and harms provide information to patients in a way they can understand before asking for their consent consider young people's capacity for decision making and consent recognise and take precautions where patients may be vulnerable, such as issues of child protection, self-harm, or elder abuse participate in processes to manage patients' complaints 	 inform patients of the material risks associated with proposed management plans treat information about patients as confidential
Teaching and learning	 discuss the aetiology of diseases, and explain the purpose, nature, and extent of the assessments to be conducted obtain informed consent or other valid authority before involving patients in teaching 	 respond appropriately to information sourced by patients, and to patients' knowledge regarding their condition
Doggarah	 provide information to patients based on current up-to-date guidelines that are consistent with international best practice (with local variations to account for local populations and local health service needs) 	 refer to evidence-based clinical guidelines demonstrate an understanding of the limitations of the evidence and the challenges of applying research in daily practice
Research	 provide information to patients in a way they can understand before asking for their consent to participate in research obtain an informed consent or other valid authority before 	
Cultural safety	 demonstrate effective and culturally safe communication with Aboriginal and Torres Strait Islander peoples and Māori effectively communicate with members of other cultural groups by meeting patients' specific language, cultural, and communication needs use qualified language or cultural interpreters to help meet patients' 	 identify when to use interpreters allow enough time for communication across linguistic and cultural barriers
Ethics and	 communication needs provide plain language and culturally appropriate written materials to patients when possible encourage and support patients 	 respect the preferences of patients
professional behaviour	to be well informed about their health, and to use this information wisely when they make decisions	maximise patient autonomy, and support their decision making

- encourage and support patients and, when relevant, their families, whānau, and/or carers, in caring for themselves and managing their health
- demonstrate respectful professional relationships with patients
- prioritise honesty, patients' welfare, and community benefit above self-interest
- develop a high standard of personal conduct, consistent with professional and community expectations
- support patients' rights to seek second opinions
- consider the zone of parental control and decision making with regards to legal, moral, and ethical considerations when conflicts in management occur between health professionals and families, whānau, and/or carers

- communicate appropriately, consistent with the context, and respect patients' needs and preferences
- avoid sexual, intimate, and/or financial relationships with patients
- demonstrate a caring attitude towards patients
- respect patients, including protecting their rights to privacy and confidentiality
- behave equitably towards all, irrespective of gender, age, culture, socioeconomic status, sexual preferences, beliefs, contribution to society, illness-related behaviours, or the illness itself
- use social media ethically and according to legal obligations to protect patients' confidentiality and privacy

Leadership, management, and teamwork

- communicate effectively with team members involved in patients' care, and with patients, families, whānau, and/or carers
- facilitate an environment in which all team members feel they can contribute and their opinion is valued
- communicate accurately and succinctly, and motivate others on the healthcare team

- answer questions from team members
- summarise, clarify, and communicate responsibilities of healthcare team members
- keep healthcare team members focused on patient outcomes

Health policy, systems, and advocacy

- collaborate with other services, such as community health centres and consumer organisations, to help patients navigate the healthcare system
- advocate for patients and their families, whānau, and/or carers to seek the support and resources they need
- communicate with and involve other health professionals as appropriate

EPA 9: Procedures

Theme	Procedures	AT-EPA-09				
Title		Plan, prepare for, perform, and provide aftercare for important practical procedures across different settings				
Description	whānau, and/or carers	technically, efficiently, and safely sks and potential complications ing procedures f procedures, aftercare protocols, actions to patients, their families, and nursing staff of procedures, including imaging and				
Professional practice framework domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity				
Medical expertise	 anticipate and facilitate procedures as required to appropriately manage critically unwell patients with life-threatening neonatal / paediatric conditions select procedures by assessing patient-specific factors, including alternatives, benefits, and risks confidently and consistently perform a range of common procedures inform team members of all allergies / adverse reactions identified, and take precautions to avoid these during procedures check that patients have complied with preprocedural preparation confirm the correct position / site / side / level on patients for planned procedures 	 assess patients, and identify indications for procedures check for allergies and adverse reactions consider risks and complications of procedures interpret results of common diagnostic procedures organise and document postprocedural reviews of patients perform procedures with support or help 				

 $^{^{12}}$ References to patients in the remainder of this document may include their families, whānau, and/or carers.

- recognise and manage complications arising during or after procedures
- recognise and correctly interpret normal and abnormal findings of diagnostic procedures
- effectively manage acute pain and distress
- demonstrate knowledge and skills in procedural pain management, such as sedation and analgesia, as well as non-pharmacological strategies
- document procedures in the clinical notes accurately, including:
 - » aftercare
 - » aseptic technique
 - » indication for procedures
 - » informed consent
 - » medications given
 - » procedures requested and performed
- explain procedures clearly to patients, families, whānau, and/or carers, including reasons for procedures, potential alternatives, and possible risks, to facilitate informed choices
- Communication
- counsel patients sensitively and effectively, and support them to make informed choices
- address patients', families', whānau, and/or carers' concerns relating to procedures, providing opportunities to ask questions
- tailor language according to individual patients' age and capacity to understand
- communicate effectively with team members, patients, families, whānau, and/or carers prior to, during, and after procedures
- ensure team members are confident and competent in their assigned roles

- explain the process of procedures to patients without providing a broader context
- help patients, families, whānau, and/or carers choose procedures
- communicate with members of procedural teams so all team members understand who each member is
- discuss post-procedural care with patients, families, whānau, and/or carers
- complete relevant patients' documentation, and conduct appropriate clinical handovers

Quality and safety

- obtain informed consent or other valid authority before undertaking any procedure
- set up all necessary equipment, and consistently use universal precautions and aseptic technique if indicated
- confirm patients' identification, verify the procedure, and, where appropriate, the correct position / site / side / level for the procedure
- provide information in a manner so that patients, families, whānau, and/or carers are fully informed when consenting to any procedures
- demonstrate an inconsistent application of aseptic technique
- identify patients using approved patients' identifiers before any treatment or intervention is initiated

 check that information on patients' consent forms matches procedures to be performed identify, document, and appropriately notify of any adverse events or equipment malfunction refer to and/or be familiar with relevant published procedural guidelines prior to undertaking procedures organise or participate in in-service training on new technology attempt to perform procedure in an unsafe environment participate in continued professional development help junior colleagues development help junior colleagues help help junior colleagues help help junior colleagues help help help junior colleagues help help help help help help help help	Ор
relevant published procedural guidelines prior to undertaking procedures procedures procedures procedures professional development help junior colleagues development new skills actively seek feedback on	
 and learning provide specific and constructive feedback and comments to junior colleagues initiate and conduct skills training for junior staff 	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
 Cultural safety Cultural safety consider individual patients' cultural perception of health and illness, and adapt practice accordingly respect religious, cultural, linguistic, and family values and differences 	
 confidently perform common procedures identify appropriate proxy decision makers when required show respect for the knowledge and expertise of colleagues maximise patient autonomy in decision making 	
 manage departmental workloads to ensure the safety of patients and staff and the delivery of timely, appropriate, and high-quality clinical care identify roles and optimal timing for diagnostic procedures critically appraise information from assessments and evaluations of risks and benefits to prioritise patients on a waiting list make clinical judgements and decisions based on available evidence select the most appropriate and cost-effective diagnostic procedures adapt procedures in response to assessments of risks to individual patients select appropriate investigations on the samples obtained in diagnostic procedures 	and vhen
Leadership, management, and teamwork provide staff with clear aftercare instructions, and explain how to recognise possible complications check that all relevant team members are aware that a procedure is occurring	

- explain critical steps, anticipated events, and equipment requirements to teams on planned procedures
- identify relevant management options with colleagues, according to their level of training and experience, to reduce error, prevent complications, and support efficient teamwork
- coordinate efforts, encourage others, and accept responsibility for work done

 discuss patients' management plans for recovery with colleagues

Health policy, systems, and advocacy

- discuss serious incidents at appropriate clinical review meetings
- initiate local improvement strategies in response to serious incidents
- use resources efficiently when performing procedures
- perform procedures in accordance with the organisational guidelines and policies



Procedure / investigation	For each prod	edure / investi	gation, trainees sh	ould be able to p	perform the comp	onents of the	procedure indicated belo	ow
	Select appropriate procedures in partnership with patients ¹³ , their families, whānau, and/or carers	Obtain informed consent from patients, their families, whānau, and/or carers	Prepare for the procedure, including patient positioning, equipment, medications, and staff	Perform procedures independently, technically, efficiently, and safely	Anticipate and manage known risks and potential complications of procedures	Provide appropriate aftercare following procedures	Clearly communicate the outcome of procedures, associated investigations, aftercare protocols, and instructions to patients, their families, whānau, and/or carers, and medical and nursing staff	Interpret the results and outcomes of procedures, including imaging and reports, and provide / arrange appropriate follow-up care
Mandatory observation captures								
advanced airway management, including endotracheal intubation and laryngeal mask airway (LMA) insertion	✓	if applicable	✓			✓	√	n/a
advanced intravenous access techniques, including, but not limited to, ultrasound guided cannulation	✓	if applicable				✓	✓	✓
basic airway management, including use of airway adjuncts, bag mask ventilation, neopuff, or anaesthetic bag	✓	if applicable				✓	✓	n/a
femoral nerve or fascia iliaca block under ultrasound guidance	✓		~	√	✓	✓	✓	n/a
fracture reduction / manipulation	✓	√	✓	✓	✓	✓	✓	✓
insertion and ongoing use of an intraosseous needle	✓	if applicable*	•	✓	✓	✓	✓	n/a
intravenous cannulation	✓	if applicable*	✓	✓	✓	✓	✓	n/a

¹³ References to patients in the remainder of this document may include their families, whānau, and/or carers.

Procedure / investigation	For each prod	edure / investi	gation, trainees sh	ould be able to p	erform the comp	onents of the	procedure indicated belo	ow
	Select appropriate procedures in partnership with patients ¹³ , their families, whānau, and/or carers	Obtain informed consent from patients, their families, whānau, and/or carers	Prepare for the procedure, including patient positioning, equipment, medications, and staff	Perform procedures independently, technically, efficiently, and safely	Anticipate and manage known risks and potential complications of procedures	Provide appropriate aftercare following procedures	Clearly communicate the outcome of procedures, associated investigations, aftercare protocols, and instructions to patients, their families, whānau, and/or carers, and medical and nursing staff	Interpret the results and outcomes of procedures, including imaging and reports, and provide / arrange appropriate follow-up care
laceration closure with glue, steri-strips, or sutures	✓	✓	✓	•	*	~	✓	n/a
large joint relocation, such as shoulder dislocation	✓	✓	~	*	~	✓	✓	✓
lumbar puncture	✓	✓	✓	~	-	✓	✓	✓
management of a displaced percutaneous endoscopic gastrostomy (PEG) tube	✓	✓		Y		√	✓	n/a
procedural sedation, including, but not limited to, ketamine and nitrous oxide	✓	✓		•	✓	✓	✓	n/a
reduction of a pulled elbow	✓	1		1	✓	✓	✓	✓
removal of a foreign body, including from the eye, ear, and nose	✓	*	X	1	✓	✓	✓	n/a
Optional / additional observation captures								
abscess incision and drainage	✓	✓	✓	✓	✓	✓	✓	n/a
adrenaline auto-injector administration	✓	✓	V	✓	✓	✓	✓	n/a
arterial line insertion	✓	✓	V	✓	✓	✓	✓	n/a
biers block	✓	✓	✓	✓	✓	✓	✓	n/a

Procedure / investigation	For each prod	cedure / investi	gation, trainees sh	ould be able to p	perform the comp	onents of the p	procedure indicated belo	ow
	Select appropriate procedures in partnership with patients ¹³ , their families, whānau, and/or carers	Obtain informed consent from patients, their families, whānau, and/or carers	Prepare for the procedure, including patient positioning, equipment, medications, and staff	Perform procedures independently, technically, efficiently, and safely	Anticipate and manage known risks and potential complications of procedures	Provide appropriate aftercare following procedures	Clearly communicate the outcome of procedures, associated investigations, aftercare protocols, and instructions to patients, their families, whānau, and/or carers, and medical and nursing staff	Interpret the results and outcomes of procedures, including imaging and reports, and provide / arrange appropriate follow-up care
central venous access insertion and management of central venous lines	✓	✓	✓	•			✓	n/a
inguinal hernia reduction	✓	✓	✓	✓	✓	✓	✓	n/a
intercostal catheter insertion (chest drain) and needle decompression of pneumothorax	✓	if applicable*	✓			✓	✓	✓
joint aspiration	✓	✓ (V	~	/	✓	✓	✓
manual reduction of paraphimosis	✓	√	✓	✓	✓	✓	✓	n/a
nerve blocks (excluding femoral and fascia iliaca blocks), such as posterior tibial block	√	/		1	~	✓	✓	n/a
suprapubic aspiration of bladder	√	*	*	✓	✓	✓	✓	✓
urethral catheterisation	✓		~	✓	✓	✓	✓	✓
use of ultrasound skills, such as:	✓	*	~	√	✓	✓	✓	n/a
ultrasound blocksultrasound guided access								

^{*} **Definition of 'if applicable':** These procedures are often performed in an emergency and/or resuscitation situation, and as a result it may not always be appropriate or possible to gain consent or full consent prior to commencing the procedure.

EPA 10: Resuscitation assessment and management

Theme	Resuscitation assessment and manage	gement AT-EPA-10
Title	Resuscitate critically ill / injured paed	liatric patients
Description	This activity requires the ability to: assess and recognise seriously unw recognise clinical deterioration follow the local process for escalatio manage acutely unwell patients ¹⁴ wh lead the resuscitation team, and invo	on of care no require resuscitation olve other necessary services edical teams
Behaviours		
Professional practice framework domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity
	The trainee will:	The trainee may:
Medical expertise	 recognise immediate life-threatening conditions and deteriorating and critically unwell patients, and respond appropriately conduct structured assessments of acutely unwell children follow planned courses of action with appropriate urgency perform advanced neonatal and paediatric life support, according to resuscitation council guidelines, to a high level of advanced resuscitation skills use defibrillators during shockable Advanced Paediatric Life Support (APLS) algorithms and for cardioversion manage compromised airways, using bag valve mask ventilation and basic and advanced techniques obtain intravenous access with standard cannulas and intraosseous devices place central venous lines and arterial lines assess children with traumatic 	 recognise seriously unwell patients requiring immediate care initiate paediatric and neonatal resuscitation as indicated adequately manage compromised airways, using bag valve mask ventilation and by using oropharyngeal and nasopharyngeal airways and laryngeal mask airways (LMAs) obtain intravenous access with standard cannulas and intraosseous devices use defibrillators during shockable APLS algorithms re-evaluate patients and their situations with sufficient frequency respond to complications as they arise

¹⁴ References to patients in the remainder of this document may include their families, whānau, and/or carers.

- perform finger thoracostomies and intercostal chest drains
- prescribe resuscitation fluids and blood products
- prescribe critical medications such as antibiotics, antiepileptics, antivirals, and insulin
- enact neuroprotective measures for children with head trauma
- demonstrate knowledge of the potential risks and complications of resuscitation
- identify critical toxicology emergencies and manage them appropriately, including cardiac arrythmias, hyperthermia, and seizures, and anticipate and respond to complications
- recognise when it is appropriate to change the focus of care from resuscitation and life preservation to comfort care with dignity
- develop appropriate post-resuscitation plans
- concisely and clearly communicate all vital information to team members during resuscitation
- communicate with all members of the paediatric resuscitation team, using closed-loop communication where appropriate
- establish and communicate clear roles, responsibilities, and priorities within the resuscitation team
- Communication

Quality

and safety

- summarise the clinical evolution of the situation to the resuscitation team
- communicate with families, whānau, and/or carers of children during resuscitation
- keep families, whānau, and/or carers informed throughout the resuscitation, if staffing allows
- allocate a member of staff to conduct hot debriefs with staff members involved with resuscitation

- communicate sufficiently to support the function of multidisciplinary teams
- communicate with patients in a timely and appropriate manner

- - maintain up-to-date certification in advanced paediatric life support
 - analyse adverse incidents and sentinel events to identify system failures and contributing factors
 - maintain a safe department while paediatric resuscitation is occurring
- comply with safety requirements of the health service
- evaluate the quality of processes through well-designed audits
- evaluate the quality and safety processes implemented within the workplace, and identify gaps in their structure

	 identify evidence-based practice gaps using clinical indicators, and implement changes to improve patients' outcomes 	 raise appropriate issues for review at morbidity and mortality meetings
	 establish a psychologically safe practice to debrief and catch up a team after a critical incident, such as resuscitation that results in the death of a patient, to support team mental wellbeing and staff retention 	
	 actively participate in multidisciplinary practice of resuscitation skills, including 	 maintain life support requirements of the health service provide constructive feedback to
Teaching and learning	simulation where availabledemonstrate effective supervision	junior colleagues to contribute to improvements in individuals' skills
	skills and teaching methods for junior colleagues around resuscitation skills and knowledge	 coordinate and supervise junior colleagues from the emergency department and wards
	incorporate current evidence-based resuscitation	 use information from credible sources to aid in decision making
Research	guidelines and protocolsconsider enrolling eligible patients in approved clinical trials	 refer to evidence-based clinical guidelines and protocols on acutely unwell patients
	accurately document the resuscitation course to contribute to quality improvement / research	demonstrate an understanding of the limitations of the evidence and the challenges of applying research in daily practice
	negotiate care decisions in a culturally appropriate way by considering variation in family	 practise culturally safe care appropriate for the community serviced
	structures, cultures, religion, or belief systems	 proactively identify barriers to healthcare access
Cultural safety	 practise culturally safe care of all patients, with particular focus on Aboriginal and Torres Strait Islander peoples and Māori 	
	 consider cultural, ethical, and religious values and beliefs in leading multidisciplinary teams 	
	 identify and respect cultural, religious, and other cultural concerns in end-of-life care 	
	 advise patients of their rights to refuse medical therapy, including life-sustaining treatment 	 communicate medical management plans as part of multidisciplinary plans
Ethics and professional	 consider the consequences of delivering non-beneficial treatment, directing to other care as appropriate 	 establish, where possible, patients' wishes and preferences about care
behaviour	 consider cases where organ donation may be appropriate, and how this process may occur or may be limited by access to local paediatric intensive care unit services 	

frequently re-evaluate patients and recognise the bounds of their their situations own abilities, and know when and how to seek assistance from recognise the need for escalations departmental colleagues or other of care, and escalate to specialities appropriate staff or services use appropriate guidelines. Judgement and evidence sources, and decision decision making support tools consolidate information given from many members of staff during resuscitations to make informed decisions regarding further treatment and investigations for patients collaborate with other team lead paediatric resuscitations members, based on their roles identify the roles and scopes and skills of practice of health professionals related to resuscitation, and use deliver appropriate multidisciplinary their expertise appropriately assessment and management work collaboratively with staff in the emergency department, intensive care, and other subspecialty inpatient units Leadership, monitor the resuscitation team's management, activities, and constructively and teamwork intervene when needed liaise with other appropriate healthcare providers if patients require transport to another use resources to allow the ongoing running of a safe emergency department while safely transporting acutely unwell children to other facilities use a considered and rational apply escalation of care procedures approach to the responsible use for deteriorating patients of resources, balancing costs use leadership and advocacy against outcomes in appraising and redesigning prioritise patients' care based systems of care that lead to on need, and consider available better patient outcomes healthcareresources collaborate with emergency medicine staff and other Health policy, colleagues to develop policies systems, and and protocols for the investigation advocacy and management of common acute medical problems follow policies on mandatory reporting advocate for paediatric emergency care resources and policies

implement disaster plans and

processes

EPA 11: Acute behavioural and psychiatric presentation and management

Theme	Acute behavioural and psychiatric prand management	esentation AT-EPA-11
Title	Manage paediatric patients presentin disturbances in the emergency depar	g with behavioural and/or psychiatric rtment
Description	This activity requires the ability to:	
	 identify possible causes of patients' 	distress and behaviour
	 understand how neurodivergence m require different assessment and ma 	nay result in behavioural differences that anagement strategies
	 use techniques to de-escalate patient 	nts ¹⁵
	 assess patients' mental states and leading 	evel of risk for injury, suicide, or violence
	 formulate differential diagnoses and 	
	 determine the need for medical inter 	rvention or admission
	 coordinate multidisciplinary care 	
	 communicate assessments and plar carers, emergency mental health se 	ns with patients, families, whānau, and/or ervices, and admitting teams
	 document all interactions, discussion decisions. 	ns, assessments, and management
Behaviours		
Professional	Ready to perform without supervision	Requires some supervision
Professional practice framework domain	Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Possible behaviours of a trainee who needs some supervision to perform this activity
	The trainee will:	The trainee may:
	 take relevant histories and examinations for psychiatric or acute behavioural disturbance presentations, including mental state exams, assessments of cognition, and, if appropriate, developmental assessments 	 demonstrate understanding of the symptoms and examination findings that concur with the diagnosis of acute psychiatric presentations demonstrate understanding of the symptoms and examination findings that suggest the diagnosis of an
Medical	 conduct appropriate risk assessments and psychosocial screenings, including assessment of suicide / self-harm risk, and risk to others 	organic cause for behavioural disturbances
expertise	 differentiate between acute behaviour psychiatric disturbances and psychiatric disorders or organic cause 	
	 assess for potential medical causes / contributions 	
	 determine the need for inpatient admission criteria due to safety concerns 	
	 initiate psychotropic medications if indicated 	

¹⁵ References to patients in the remainder of this document may include their families, whānau, and/or carers.

- administer methods of sedation
- manage complications of sedation if they arise, including resuscitation
- develop appropriate discharge plans, including outpatient mental health referrals, safety planning, and psychoeducation for patients discharged home
- communicate in a style that allows pertinent psychiatric histories to be obtained
- use a communication style that allows young people to be asked sensitive questions about the cause of their distress without distressing them further, when required
- maintain a non-judgemental attitude towards the behaviour of children or adolescents
- use crisis intervention and de-escalation techniques
- check with, and, where appropriate, involve family, whānau, and/or carers in using calming or de-escalation techniques
- provide documentation, including relevant histories, evaluations, risk assessments, and disposition plans

- demonstrate proficiency in adolescent interview techniques
- demonstrate communication skills to sufficiently support the function of multidisciplinary teams

assess patients in a space where distractions are minimised

- remove other patients and bystanders from the immediate vicinity, acknowledging that family and significant others may have an important role in assessment of patients
- consider risks in the context of the emergency department setting, such as absconding or environmental hazards
- evaluate and explain the benefits and risks of clinical interventions based on individual patients' circumstances
- identify and manage key risks for patients during transitions of care

- evaluate quality and safety processes implemented within the workplace, and identify gaps in their structure
- keep patients' information secure, adhering to relevant legislation regarding personal information and privacy

Teaching and learning

Quality

and safety

Communication

- participate in debriefing sessions following sedation of patients
- obtain informed consent before involving patients in teaching activities
- set goals and objectives for self-learning

Research	 critically analyse relevant literature and refer to evidence-based guidelines 	refer to guidelines and medical literature to assist in clinical assessments when required
	 participate in clinical research, and follow research protocols where appropriate 	 demonstrate an understanding of the limitations of evidence and the challenges of applying research in daily practice
Cultural safety	 use interpreters where required liaise with Aboriginal and Torres Strait or Māori liaison officers or Indigenous mental health workers engage with patients, families, whānau, and/or carers to gather information in an atmosphere of trust and cooperation acknowledge and reflect on patients' beliefs and values, and how these might impact on health 	 display respect for patients' cultures, and attentiveness to social determinants of health appropriately access interpretive or culturally focused services
Ethics and professional behaviour	 assess patients' capacity for decision making, involving a proxy decision maker appropriately obtain consent from patients, families, whānau, and/or carers prior to the administration of any treatments or any restrictive practice 	 consider patients' decision-making capacity identify patients' preferences regarding management and the role of families, whānau, and/or carers in decision making
Judgement and decision making	 recognise the need for escalations of care, and escalate to appropriate staff or service integrate evidence related to questions of diagnosis, therapy, prognosis, risks, and causes into clinical decision making assess the impact of developmental conditions and 	 involve additional staff to assist in a timely fashion when required recognise situations in which to ask for help
	developmental conditions and neurodiversity on behaviour consult with psychiatry and/or	collaborate with and use other team
Leadership, management, and teamwork	 social work staff as needed coordinate multidisciplinary care for potentially high-risk presentations provide support to the emergency department team, including junior clinicians and nursing staff, when managing acutely behaviourally disturbed patients 	members, based on their roles and skills deliver appropriate multidisciplinary assessment and management
Health policy, systems, and advocacy	follow legislation, such as guardianship requirements and mental health acts, relevant to the local area, to assess if patients can legally be held in the hospital against their will or can be restrained, such as with the use of safe rooms or physical or chemical restriction	 identify and navigate components of the healthcare system relevant to patient care identify and access relevant community resources to support patient care

complete the appropriate state-based documentation when enacting forms of restriction, and follow local health protocols, guidelines, and policy

Knowledge Guides

Knowledge guides (KGs) provide detailed guidance to trainees on the important topics and concepts trainees need to understand to become experts in their chosen specialty.



Trainees are not expected to be experts in all areas or have experience related to all items in these guides.

#	Title
1	Foundations of paediatric emergency medicine
2	Acute illness
3	Acute injury
4	Child safety and maltreatment
5	Psychiatric and behavioural disturbance



Knowledge guide 1 – Foundations of paediatric emergency medicine

Advanced Training in Paediatric Emergency Medicine

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

Advanced Trainees will have in-depth knowledge of the topics listed under each clinical sciences heading.

For the statistical and epidemiological concepts listed, trainees should be able to describe the underlying rationale, the indications for using one test or method over another, and the calculations required to generate descriptive statistics.

- Anatomy and physiology, including normal and abnormal ranges and development
- Basic sciences, epidemiology, and pathophysiology of critical paediatric illness and injury, including:
 - » diagnosis
 - » evidence-based management
 - » pharmacology
 - » treatment
- · High-risk clinical features and comorbidities
- Patterns of clinical and physiological decompensation
- Pharmacological and non-pharmacological pain relief
- Pharmacology of pain relieving and sedative agents, such as:
 - » analgesics, including:
 - o nitrous oxide
 - » general anaesthetics, including:
 - sedatives
 - » local anaesthetics
- Physiological and clinical responses to pain
- Stabilisation and emergency treatment in critical illness or injury

INVESTIGATIONS, PROCEDURES, AND CLINICAL ASSESSMENT TOOLS

Advanced Trainees will know the scientific foundation of each investigation and procedure, including relevant anatomy and physiology. They will be able to interpret the reported results of each investigation or procedure.

Advanced Trainees will know how to explain the investigation or procedure to patients¹⁶, families, and carers, and be able to explain procedural risk and obtain informed consent where applicable.

Clinical assessment tools

- Comparative pain scale
- Local / Statewide / National clinical assessment tools, including, but not limited to:
 - » anaphylaxis
 - » asthma
 - » bronchiolitis
 - » burns
 - » cervical spine injury
 - » diabetic ketoacidosis
 - » gastroenteritis
 - » head injury
 - » hydration status
 - » sepsis
 - » stroke
- Oximetry and capnography to monitor intubated patients
- Resuscitation and critical care structured assessment

Investigations

- Biochemical:
 - » blood gases
 - » endocrinological:
 - blood glucose level
 - o ketones
 - » inflammatory markers
 - » stool:
 - faecal calprotectin
 - » urine

¹⁶ References to patients in the remainder of this document may include their families, whānau, and/or carers.

- ECG
- Haematological:
 - » full blood count
 - » transfusion sample
- Metabolic:
 - » hypoglycaemia screen
 - » metabolic screening tests
 - » newborn blood spot screening
 - » urine screen:
 - o drug
 - o metabolic
- Microbiological:
 - » antimicrobial sensitivity, culture, and microscopy
 - » blood tests, such as:
 - o bacterial
 - viral polymerase chain reaction (PCR)
 - » cerebral spinal fluid
 - » serology
 - » skin / fluid swabs:
 - o antimicrobial sensitivity and culture
 - o bacterial and viral PCR
 - microscopy
 - » stool:
 - culture and antimicrobial sensitivity
 - cysts, ova, and parasites
 - » urine:
 - o antimicrobial sensitivity and culture
- Patient monitoring
- Radiological:
 - » CT
 - » MR
 - » ultrasound including point of care ultrasound
 - » x-ray

Procedures

- Advanced airway support, including difficult airways:
 - » intercostal catheters
 - » intubation and rapid sequence inductions
 - » larvngeal mask use
 - » nasotracheal intubation
 - » needle cricothyroidotomy
 - » orotracheal
 - » percutaneous needle thoracocentesis
 - » surgical airways
- Advanced life support:
 - » cardioversion for arrhythmia
 - » defibrillation
 - » fluid resuscitation
 - » pericardiocentesis
 - » pharmacology, including:
 - o antiarrhythmics
 - o inotropes
 - o vasodilators
- Analgesia and sedation procedures:
 - » general anaesthetic administration, including:
 - o inhalation analgesics
 - o sedation:
 - benzodiazepine with or without fentanyl
 - choral hydrate
 - dexmedetomidine
 - ketamine
 - nitrous oxide

- propofol
- » immobilisation techniques, including splinting
- » nerve blocks:
 - o Bier block
 - digital nerve block
 - fascia iliaca compartment block
 - o femoral nerve block
 - other nerve blocks
- Foreign body removal, from:
 - » ear
 - » eye
 - » mouth
 - » nose
 - » skin
 - » soft tissue
- Lumbar puncture
- Practical trauma procedures:
 - » airway management, including:
 - o bag and mask ventilation
 - o circulation management
 - o endotracheal intubation
 - manoeuvres and adjuncts
 - o mechanical ventilation
 - o oxygen delivery systems
 - o ventilation:
 - invasive
 - non-invasive
- Temperature homeostasis
- Ultrasound guided procedures, including, but not limited to:
 - » cannulation
 - » fracture manipulation
- Vascular procedures:
 - » arterial:
 - o cannulation
 - o puncture
 - » cardiac pacing
 - » vascular access:
 - o central
 - o intraosseous

IMPORTANT SPECIFIC ISSUES

Advanced Trainees will identify important specialty-specific issues and the impact of these on diagnosis, management and outcomes.

- Child protection
- Emergency Medical System (EMS), including communicating with pre-hospital providers
- Management of mental health / behaviours of concern in the emergency department
- Neurodiversity
- Reducing overuse of investigations and treatments
- Understand the techniques, utility, and limitations of focused ultrasound in guiding paediatric procedures

Disasters involving children

- Considerations of disaster site management:
 - » equipment and supplies
 - » field hospitals
 - » media management
 - » roles and responsibilities
 - » transport
- Disaster preparation planning and training

- Emergency department resources required to receive victims of a disaster:
 - » equipment
 - » personnel
- Essential information that must be communicated following a disaster
- Management of collegial, nursing, and transport staff
- Methods of disaster site triage and on-site treatment
- Occupational health and safety risks
- Potential medical issues:
 - » mental health
 - » public health
- Regional, state, and national governments' responsibilities following disasters

Manage the death of a child

- Criteria for:
 - coronial investigation
 - » determining death
- Grieving process
- Organ donation requirements
- Religious and cultural attitudes to death
- Staff support, and organisations to assist mourning families

Retrieval and/or transfer

- Inter-hospital transfer:
 - » handover protocol
 - » risk factors
 - » transfer:
 - o disposition
 - o method
 - » transfer of responsibilities
- Intra-hospital transfer:
 - » clinical handover
 - » handover protocol
 - » monitoring devices
 - » risk factors
- Retrieval medicine

Risk management

- Australasian triage scale indicators
- Clinical risk management processes, including:
 - » complaint and incident report management
 - » consent
 - » consultation
 - » documentation
 - » quality assurance
- Medical advice that may be provided by telephone triage
- Risk components of an emergency medical department



Knowledge guide 2 – Acute illness

Advanced Training in Paediatric Emergency Medicine

KEY PRESENTATIONS AND CONDITIONS

Advanced Trainees will have a comprehensive depth of knowledge of these presentations and conditions.

Presentations

- Abdominal:
 - » distension
 - » mass
 - » pain
- Acute scrotum
- Altered level of consciousness
- Anaphylaxis
- Angioedema
- Bites:
 - » snake
 - » spider
- Anorexia
- Apnoea / Irregular breathing
- Ataxia
- Bleeding
- Bruising
- Chest pain
- Chronic illness
- Chronic pain
- Collapse
- Complications of immunisation
- Constipation
- Cough
- Cyanosis
- Dehydration
- Developmental:
 - » abnormalities
 - » delay
 - » syndromes
 - » regression
- Diarrhoea
- Difficulty swallowing / Drooling
- Dysuria
- Ear discharge
- Electrolyte abnormalities
- Emergency contraception
- Epistaxis
- Erythrodermas and skin failure
- Facial swelling
- Fever, including:
 - » in the returned traveller
- Focal neurological deficit
- Foreign body:
 - » ingestion
 - » inhalation
- Goitre
- Haematemesis
- Haemoptysis

For each presentation and condition, Advanced Trainees will **know how to:**

Synthesise

- » recognise the clinical presentation
- » identify relevant epidemiology, prevalence, pathophysiology, and clinical science
- » take a comprehensive clinical history
- » conduct an appropriate examination
- » establish a differential diagnosis
- » plan and arrange appropriate investigations
- » consider the impact of illness and disease on patients¹⁷ and their quality of life when developing a management plan

Manage

- » provide evidence-based management
- » prescribe therapies tailored to patients' needs and conditions
- » recognise potential complications of disease and its management, and initiate preventative strategies
- » involve multidisciplinary teams

Consider other factors

» identify individual and social factors and the impact of these on diagnosis and management

¹⁷ References to patients in the remainder of this document may include their families, whānau, and/or carers.

- Hair problems
- Headache
- Haematuria / Change in urine
- Hernia
- Hyperpigmentation
- Hypertension
- Hyperthermia
- Hypoglycaemia
- Hypothermia
- Inborn errors of metabolism
- Infections in immunocompromised children
- Insulin pump failure
- Intoxication from alcohol or drugs of abuse
- Jaundice
- Joint:
 - » stiffness
 - » swelling
- Lethargy
- Limp
- Lumps and bumps
- Lymphadenopathy
- Movement disorders
- Nail problems
- Oedema
- Organomegaly
- Paediatric resuscitation
- Pain, such as:
 - » ear
 - » joint
 - » pelvic
- Palpitations
- Photosensitivity
- Polydipsia
- Polyuria
- Poisoning and overdose
- Poor:
 - » dentition
 - » feeding
- Poor or abnormal growth
- Post-tonsillectomy haemorrhage
- Problems of the penis and foreskin, acute
- Precocious puberty
- Rash, such as:
 - » eczematous
 - » neonatal
 - » non-blanching
 - » papular
 - » papulosuamous
 - » pustular
 - » vesiculobullous
- Rectal bleeding
- Recurrent / Severe infection
- Reduced urine output
- Respiratory distress
- Rhinitis
- Seizures

- Sexual assault
- Shock
- Sore throat
- Stomatitis
- Stridor and noisy breathing
- Swelling / Protrusion of the ear
- Syncope
- Tooth pain / swelling
- Ulceration
- Unsettled baby
- Urinary retention
- Urticaria
- Vaginal:
 - » bleeding
- » discharge
- Vascular malformations
- Vomiting
- Weakness
- Weight loss
- Wheezing

Conditions

Cardiovascular

- Cardiac murmurs
- Coarctation of the aorta
- Hypertrophic obstructive cardiomyopathy (HOCM)
- Myocarditis
- Palpitations
- Pericarditis
- Supraventricular tachycardia
- Syncope and causes, including, but not limited to:
 - » breath-holding spells
 - » tetralogy of Fallot
 - » vasovagal syncope
 - » ventricular tachycardia

Dental

- Abscess
- Caries

Dermatological

- Bacterial skin infections
- Dermatitis
- Eczema, including eczema herpeticum
- Erythema multiforme
- Henoch–Schönlein purpura
- Impetigo
- Kawasaki disease
- Petechiae
- Purpura
- Scabies
- Skin changes associated with bacterial infections, such as:
 - » rheumatic fever
 - » scarlet fever
 - » staphylococcal scalded skin syndrome (SSSS)

- Skin changes associated with immunological conditions, such as:
 - Kawasaki disease
- Stevens-Johnson syndrome
- Toxic shock
- Urticaria
- Viral exanthems, including warts
- Viral rashes, including:
 - » measles
 - » non-specific

Developmental and congenital

- Attention deficit hyperactivity disorder (ADHD)
- Autism spectrum disorder
- Spina bifida
- Trisomy 21

Ear, nose, and throat

- Mouth ulcers:
 - » bacterial
 - » viral
- Otitis:
 - » externa
 - » media
- Quinsy
- Sinusitis
- Tonsillitis

Endocrinological

- Adrenal:
 - crisis
 - » gland disorders
- Diabetes mellitus:
 - » type 1
 - » type 2
- Diabetic ketoacidosis
- Hypoglycaemia
- Insulin pump failure
- Polydipsia
- Polyuria

Gastrointestinal

- Appendicitis
- Bilious vomiting
- Bowel obstruction
- Cholecystitis
- Constipation
- Gastroenteritis
- Haematemesis
- Hernia:
 - » incarcerated
 - » irreducible
- Hirschsprung disease
- Infectious diseases
- Inflammatory bowel diseases
- Ingested foreign body
- Intussusception
- Jaundice
- Malrotation or volvulus
- Pancreatitis

- Pyloric stenosis
- Umbilicus disorders

General

- Dehydration
- Shock

Haematological and oncological

- Anaemia
- Haemorrhage and haemorrhagic shock
- Haemorrhagic and thrombotic disease
- Idiopathic thrombocytopenic purpura (ITP)
- Leukaemia
- Lymphoma
- Neutropoenia and sepsis
- Pancytopenia
- Solid organ tumours
- Thrombocytopaenia

Immunological

- Allergies
- Anaphylaxis

Infectious disease

- Bacterial tracheitis
- Kawasaki disease
- Rheumatic fever, acute
- Sepsis
- Vesicoureteral reflux

Metabolic

• Hypoglycaemia

Musculoskeletal

- Limp, acute
- Osteomyelitis
- Parathyroid disorders
- Perthes disease
- Septic arthritis
- Slipped upper femoral epiphysis
- Thyrotoxicosis
- Transient synovitis

Neonatal

- Jaundice
- Neonatal acne

Neurological

- Bell's palsy
- Cerebral palsy
- Encephalitis
- Facial weakness
- Intracranial neoplasms
- Meningitis
- Migraines
- Raised intracranial pressure
- Seizures and movement disorders

Renal

Glomerulonephritis

Henoch–Schönlein purpura

Respiratory

- Asthma
- Bronchiolitis
- Croup
- Empyema
- Laryngomalacia and tracheomalacia
- Lower respiratory tract infection
- Lung abscess
- Neonatal apnoea
- Pertussis
- Pleural effusion
- Pneumonia and its complications
- Pneumothorax
- Respiratory distress
- Stridor
- Upper respiratory tract infection

Toxicological

- Alcohol intoxication
- Antidepressant and antipsychotic overdose
- Clonidine overdose
- Paracetamol overdose

Urological

- Acute idiopathic scrotal oedema
- Phimosis
- Urinary retention
- Urine infections

LESS COMMON OR MORE COMPLEX PRESENTATIONS AND CONDITIONS

Advanced Trainees will understand these presentations and conditions.

Advanced Trainees will understand the resources that should be used to help manage patients with these presentations and conditions.

Presentations

- Exposure to toxic gases
- Marine envenomation
- Poisonous fungi / plant ingestion and exposure

Conditions

Cardiovascular

- Acute coronary syndrome
- Anomalous left coronary artery
- Aortic stenosis
- Arrhythmogenic right ventricular cardiomyopathy
- Atrial septal defect (ASD)
- Atrioventricular (AV) blocks
- Brugada syndrome
- Cardiac transplantation
- Coronary aneurysms, with Kawasaki disease
- Ebstein anomaly
- Endocarditis
- Heart failure
- Hypertensive emergencies
- Patent ductus arteriosus (PDA)
- Prolonged QT interval
- Pulmonary:
 - » atresia / stenosis
 - » hypertension

- Rheumatic heart disease
- Single ventricle physiology (hypoplastic left / right heart)
- Sinus node dysfunction
- Total anomalous pulmonary venous return
- Transposition of the great arteries
- Tricuspid atresia
- Truncus arteriosus
- Ventricular septal defect (VSD)
- Wolff–Parkinson–White syndrome

Dermatological

- Bullous disease
- Haemangiomas

Developmental and congenital

- CHARGE syndrome
- Developmental delay and regression
- Foetal alcohol syndrome
- Fragile X syndrome
- Muscular dystrophy
- VACTERL association

Ear, nose, and throat

- Nasal polyps
- Obstructive sleep apnoea

Endocrine

- Addison disease
- Adrenal crisis
- Congenital adrenal hyperplasia
- Diabetes insipidus
- Goitre
- Hyperpigmentation
- Hypothalamus disorders
- Parathyroid disorders
- Pituitary:
 - » crisis
 - » gland disorders
- Precocious puberty
- Rickets
- Thyroid crisis
- Thyrotoxicosis

Gastrointestinal

- Abdominal mass / organomegaly
- Short gut

General

Sudden unexplained death

Haematological and oncological

- Haemoglobinopathies
- Transfusion reactions
- Tumour lysis syndrome

Immunological

- Angioedema
- Immune deficiency-related infections

Infectious

- Fever in the returned traveller
- Immunisation and complications of immunisation
- Infections in immunocompromised children

Metabolic

- Amino acid metabolism
- Carbohydrate metabolism
- Inborn errors of metabolism
- Lipids metabolism

Musculoskeletal and rheumatological

- Inflammatory joint conditions:
 - » juvenile idiopathic arthritis
- Neoplasms
- Overuse syndromes
- Skeletal dysplasia

Neurological

- Acute disseminated encephalomyelitis
- Ataxia
- Autonomic neuropathies
- Guillain–Barré disease
- Haemorrhagic and ischaemic strokes
- Neurodegenerative disorders
- Neuromuscular disorders
- Spinal cord disorders
- Toxic neuropathies
- Transverse myelitis
- Vascular disorders
- Venous sinus thrombosis

Obstetric and gynaecological

- Non-pregnancy-related emergencies, including:
 - » dysfunctional uterine bleeding
 - » menorrhagia
 - » heavy per vaginum (PV) bleeding
 - » pelvic inflammatory disease
 - » sexually transmitted infections
 - » vaginal trauma
- Pregnancy-related emergencies, including:
 - » bleeding in:
 - o early pregnancy
 - o late pregnancy
 - ectopic pregnancy
 - » pre-eclampsia / eclampsia

Renal

- Kidney vein thrombosis
- Neurogenic bladder
- Polycystic kidney disease
- Renal artery stenosis
- Renal stones

- Urinary tract obstructions
- Vesicoureteral reflux

Respiratory

- Chronic respiratory disease, such as:
 - » congenital abnormalities, such as:
 - congenital diaphragmatic hernia
 - » cystic fibrosis
 - » primary ciliary dyskinesia
- Pneumomediastinum
- Pulmonary:
 - » embolism
 - sequestration
- Subglottic stenosis
- Tuberculosis
- Vascular ring
- Vocal cord dysfunction

Toxicological

- Anticholinergic syndrome
- Beta blocker overdose
- Calcium channel blocker overdose
- Carbon monoxide poisoning
- Cholinergic syndrome
- Drugs of abuse use and withdrawal
- Hydrocarbon toxicity
- Neuroleptic malignant syndrome
- Non-steroidal anti-inflammatory drug (NSAID) overdose
- Opiate overdose
- Organophosphate toxicity
- Serotonin syndrome
- Sodium channel blocker overdose
- Sympathomimetic syndrome
- Toxic alcohol overdose

Urological

- Paraphimosis
- Penile discharge

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

Advanced Trainees will have a comprehensive depth of knowledge of the principles of the foundational sciences.

- Age- and anatomy-related normal physiology
- Normal dental development

Prescribing and treatment

- Basic toxicology
- Clinical pharmacology
- Infections that require medication prescription:
 - » antifungal
 - » antiparasitic
 - » antiviral
- Pathophysiology of:
 - » acid-base and electrolyte disturbances
 - » cardiovascular failure
 - » coma
 - » respiratory failure shock

INVESTIGATIONS, PROCEDURES, AND CLINICAL ASSESSMENT TOOLS

Advanced Trainees will know the scientific foundation of each investigation and procedure, including relevant anatomy and physiology. They will be able to interpret the reported results of each investigation or procedure.

Advanced Trainees will know how to explain the investigation or procedure to patients, families, and carers, and be able to explain procedural risk and obtain informed consent where applicable.

Clinical assessment tools

- Airway, Breathing, Circulation, Disability, Exposure (ABCDE) assessment of critically unwell children
- Development assessment
- Home, Education / Employment, Eating / Exercise, Activities, Drugs and alcohol, Sexuality, and Suicide and depression, Safety (HEEADSSS) assessment
- Mental state
- Percentile growth chart
- Primary, secondary, and tertiary survey

Investigations and procedures

Cardiovascular

- Antiarrhythmic therapy
- Blood:
 - arterial and venous blood sampling and analysis
 - » blood, platelet, and clotting factor transfusion
- Ductus arteriosus therapy
- Intravenous catheter insertion:
 - » central
 - » peripheral
- Use of defibrillator for resuscitation or for cardioversion

Dental

- Assessment of dental injuries
- · Temporary fixation of injured secondary teeth

Developmental abnormalities and syndromes

Developmental screening

Ear, nose, and throat

- Ear wick insertion
- Epistaxis management with nasal packing
- Nasal packing
- Post-tonsillectomy haemorrhage management

Endocrinological

- Blood glucose check
- Ketone check
- Venous blood gas, and interpretation of results

Gastrointestinal

- External rectal examination
- Gastrostomy tube replacement
- Hernia reduction
- Nasogastric tube insertion
- Orogastric tube insertion

Haemtological and oncological

Central line access

Immunological

- Coombs test
- Immunisation

Infection disease

- Abscess drain
- Cultures from:
 - » cerebrospinal fluid
 - » mucosa
 - » secretions
 - » skin
 - » stool

- » urine
- Lumbar puncture (LP)
- Malarial films
- Perinasal swab
- Serology
- Suprapubic aspirate
- Swab for:
 - » enzyme immunoassay
 - » immunofluorescence
 - » polymerase chain reaction (PCR)
- Urethral catheterisation

Metabolic

Take and interpret glucose and ammonia levels

Musculoskeletal

Knee joint aspiration

Neurological

- Consciousness levels using:
 - » Glasgow Coma Scale
 - Paediatric Glasgow Coma Scale
- Fundoscopy
- Interpretation of CT scan
- Measurement of opening pressure on LPs
- Performing an LP for cell count, glucose, and protein, and interpretation of results

Obstetric and gynaecologic

- External genital examination for injuries
- Forensic examination of sexual assault victims
- Pregnancy test
- Vaginal speculum examination for pregnant patients experiencing significant miscarriage or cervical shock

Opthalmology

- Bacterial and viral swabs of the eye
- Use of slit lamp with fluoresceine

Respiratory

- Ability to set up ventilators for acute medical conditions, such as a patient intubated for seizure control or severe asthma
- Arterial and venous blood gas
- Basic CT chest scan interpretation
- Bubble continuous positive airway pressure (CPAP)
- Chest x-ray interpretation
- High-flow oxygen therapy
- Lateral airway radiography
- Non-invasive ventilation
- Pulse oximetry
- Spirometry and measures of gas exchange

Urological

- Acute treatment of phimosis with urinary retention
- Reduction of paraphimosis
- Suprapubic aspirate of urine
- Urethral catheter insertion
- Urine dipstick

IMPORTANT SPECIFIC ISSUES

- Awareness of 'one pill can kill' medications, such as:
 - » calcium channel blockers
 - » carbamazepine
 - » clozapine

Advanced Trainees will identify important specialty-specific issues and the impact of these on diagnosis and management and integrate these into care.

- » opioids
- » propranolol
- » sodium channel blockers
- » sulfonylureas
- » tricyclic antidepressants
- » venlafaxine
- Awareness of 'one sip can kill' medications, such as:
 - » camphor
 - » corrosives
 - » hydrocarbons
 - » naphthalene
 - » organophosphates
 - » paraquat
- Expected clinical course and outcome of illnesses
- High-risk clinical features of illnesses and comorbidities
- · Impact of long-term illness on development
- Infection control:
 - » communicable disease reporting
 - » immunisation
 - » isolation
- Management of infection in travellers
- Management process following needlestick injury
- Medical and support agencies for pregnancy referral
- Methods of:
 - » behaviour modifications
 - » physical restraint
- Paediatric resuscitation
- Potential risks to patients' safety
- Safety issues for patients and staff:
 - » personal protective equipment
 - » universal precautions
- Sexual assault counselling agencies
- Signs of severity and patterns of decompensation
- Techniques, utility, and limitations of focused ultrasound in guiding paediatric procedures
- The need for medical clearance

Treatment therapies

- Treatment of haematological and oncologic conditions:
 - » chemotherapy
 - » radiation therapy



Knowledge guide 3 – Acute injury

Advanced Training in Paediatric Emergency Medicine

KEY PRESENTATIONS AND CONDITIONS

Advanced Trainees will have a comprehensive depth of knowledge of these presentations and conditions.

Environmental injury

- Barotrauma
- Bites and stings:
 - animal
 - » human
 - » insect
 - » marine
 - » reptile
- Burns:
 - » chemical
 - » contact
 - » lightning injury
 - » radiation injury
 - » scalds
 - » smoke inhalation
 - » sunburn
- Cold injury:
 - » peripheral cold injuries
 - » systemic hypothermia
- Decompression illness
- Drowning
- Environmental and burns, including:
 - » environmental exposures:
 - o hyperthermia
 - o hypothermia
- Heat injury
- Radiation
- Toxic marine ingestions

General types of injury

- Burns
- Internal
- Laceration
- Non-accidental
- Orthopaedic
- Toxic

Injuries by region

- Abdominal injury:
 - » hepatic
 - » hollow viscus
 - » kidney
 - » pancreatic
 - » splenic
- Back injury:
 - » ligamentous injuries
 - » musculoskeletal back pain
 - » spinal cord injuries

For each presentation and condition, Advanced Trainees will **know how to:**

Synthesise

- » recognise the clinical presentation
- » identify relevant epidemiology, prevalence, pathophysiology, and clinical science
- » take a comprehensive clinical history
- » conduct an appropriate examination
- » establish a differential diagnosis
- » plan and arrange appropriate investigations
- » consider the impact of illness and disease on patients¹⁸ and their quality of life when developing a management plan

Manage

- » provide evidence-based management
- » prescribe therapies tailored to patients' needs and conditions
- » recognise potential complications of disease and its management, and initiate preventative strategies
- » involve multidisciplinary teams

Consider other factors

» identify individual and social factors and the impact of these on diagnosis and management

¹⁸ References to patients in the remainder of this document may include their families, whānau, and/or carers.

- » spinal fractures
- Chest injury:
 - » flail chest:
 - o fractured ribs
 - o fractured sternum
 - o injury of great vessels
 - » haemothorax
 - » penetrating thoracic injury:
 - o myocardial contusion
 - o pericardial tamponade
 - » pneumothorax
 - » pulmonary contusion
 - » traumatic asphyxia:
 - o diaphragmatic eventration
 - tracheobronchial rupture
- Face injury:
 - » burns
 - » dental
 - » ear
 - » eye, including:
 - foreign bodies
 - facial fractures
 - » jaw dislocation
 - » lacerations
 - » nose
- Genitourinary or pelvic injury:
 - » bladder rupture:
 - pelvic fracture
 - straddle injuries
 - » penetrating genitourinary trauma
 - » penile / perineal / vaginal injury
 - » sexual assault
 - » testicular trauma
 - » ureteric:
 - urethral
- Hand injury:
 - » amputation
 - » crush injury
 - » cutaneous foreign bodies
 - » lacerations / skin injury:
 - contaminated
 - o cutaneous foreign body
 - o deep lacerations
 - o degloving
 - o marine wounds, including:
 - coral
 - o non-venomous bites
 - o puncture wounds
 - o superficial lacerations
 - » nail and nail bed
 - » nerve
 - » pressure injection injury:
 - animal bites
 - o fractures
 - o penetrating injuries
 - o tendon
- Head injury:
 - » concussion

- » diffuse axonal injury
- » extra-axial
- » haematomas
- » intracerebral
- » intracranial
- » minor head injuries
- » non-accidental
- » penetrating head injury
- » post-concussive syndrome
- » skull fractures
- Neck and spinal injury:
 - » fractures
 - » nerve injury
 - » spinal cord injury without radiologic abnormality
 - » spinal cord syndromes
 - » vascular injury

Orthopaedic injury

- Dislocations:
 - acromioclavicular joint
 - » ankle
 - » elbow, including:
 - o pulled elbow
 - » hip
 - » jaw
 - » knee
 - » patella
 - » phalanges, including:
 - o hand
 - o foot
 - shoulder
- Ligamentous / Soft tissue injury:
 - » ankle
 - » apophysitis / osteochondrosis
 - » compartment syndrome
 - » elbow
 - » foot
 - » hand, such as:
 - trigger finger
 - knee
 - » Lisfranc
 - » muscular sprain
 - » shoulder
 - » tendinopathies
- Lower limb fracture:
 - » avulsion fracture of fifth metatarsal
 - » distal tibia, including:
 - o epiphyseal-metaphyseal
 - » femoral neck and shaft
 - » fibula
 - » metatarsal
 - » midshaft and proximal tibia
 - » patella
 - » phalangeal
 - » slipped upper femoral epiphysis
 - » tarsal, including:
 - o calcaneus
 - o talus
 - » tibial plateau tibial spine

- » toddler's fracture
- Pelvic fractures:
 - » avulsion fractures
 - » superior iliac spine:
 - o anterior
 - o inferior
 - » ischial tuberosity
 - » pelvic rim fractures
- Spinal injuries:
 - » ligamentous and soft tissue injuries
 - spinal cord injury without radiologic abnormality
 - » spinal cord syndromes
 - » vertebral fracture and dislocation
- Upper limb fracture:
 - » carpal
 - » clavicle
 - » distal radius and ulna, including:
 - o epiphyseal-metaphyseal
 - » Galeazzi and Monteggia fractures
 - » lateral and medial humeral condyles
 - » metacarpal
 - » midshaft:
 - o humerus
 - o radius
 - o ulna
 - » phalangeal
 - » proximal ulna
 - » radial head and neck
 - » scapular
 - » supracondylar:
 - o **grading**
 - o occult
 - » upper humerus, including:
 - o epiphyseal-metaphyseal

LESS COMMON OR MORE COMPLEX PRESENTATIONS AND CONDITIONS

Advanced Trainees will understand these presentations and conditions.

Advanced Trainees will understand the resources that should be used to help manage patients with these presentations and conditions.

No less common or more complex presentations and conditions listed

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

Advanced Trainees will have a comprehensive depth of knowledge of the principles of the foundational sciences.

- Age- and anatomy-related normal physiology of injured area:
 - » abdominal or pelvic
 - » chest
 - » facial
 - » genitourinary
 - » hand
 - » head
 - » neck
 - » orthopaedic
 - » soft tissue
 - » spinal
- Signs of severity and patterns of decompensation
- Toxic injury:
 - » antidotes for common poisons
 - » epidemiology of poisoning
 - » pharmacological techniques for drug removal
 - » toxicology and drug testing and screening methods

INVESTIGATIONS, PROCEDURES, AND CLINICAL ASSESSMENT TOOLS

Advanced Trainees will know the scientific foundation of each investigation and procedure, including relevant anatomy and physiology. They will be able to interpret the reported results of each investigation or procedure.

Advanced Trainees will know how to explain the investigation or procedure to patients, families, and carers, and be able to explain procedural risk and obtain informed consent where applicable.

Clinical assessment tools

Burns

Burn depths categorisation

Head

- Evaluate degrees of head injury scalp lacerations
- Level of consciousness

Facial

- Eye examination, including:
 - » slit lamp

Toxic

- Assess need for and administer activated charcoal
- Drug testing and screening
- Patient decontamination for chemical agents

Investigations - general

- CT
- MRI
- Pathology, including blood tests in trauma, including:
 - » chemistry
 - » cross-match
 - » full blood count
 - » lipase
- Ultrasound

- Urine testing, including:
 - » BHcG (when indicated)
- X-rays

Investigations

Burns

• Burn nomogram

Chest injury

- Investigations for inhaled foreign bodies
- Ultrasound

Facial injury

Orthopantomogram

Head injury

- CT
- MRI
- Radiological investigations, such as:
 - » fundoscopy

Vascular injury

- Angiography
- Doppler ultrasound
- Sonography

Procedures

Burns

- Dressing selection and application
- Escharotomy
- Fluid resuscitation

Chest injury

- Intercostal drain insertion
- Percutaneous needle thoracostomy
- Pericardiocentesis

Facial injury

- Anterior nasal pack
- Facial burns:
 - » dressing for superficial and partial thickness burns
 - » refer higher degree burns
- Foreign body removal:
 - » ear
 - » eye:
 - o conjunctival
 - o corneal
 - » nose
- Irrigate conjunctival and corneal eye burns
- Reduce temporomandibular joint dislocation
- · Reimplant secondary tooth
- Repair lacerations:
 - » sutures
 - » tissue adhesives

General

- Procedural sedation:
 - » contraindications and indications
 - » options for procedural sedation in the emergency department

Genitourinary or pelvic injury

- Foreign body investigation and removal
- Stabilise pelvic fracture

Hand injury

- Digital nerve block
- Ring removal
- Splinting:
 - » interphalangeal joint dislocation
 - » metacarpal fracture
 - » metacarpophalangeal joint dislocation
 - » phalangeal fracture

Head injury

- Laceration repair:
 - » glue
 - » staples
 - » sutures
- Management of raised intracranial pressure, including:
 - » neuroprotective measures
- Neurosurgical time-critical intervention, including:
 - » burr holes

Lacerations

- Amputated area management
- Fishhook removal
- Foreign body removal
- Wound:
 - » anaesthesia administering
 - » cleanse and debride
 - » dressing

Orthopaedic

- Casting
- Nerve blocks:
 - » fascia iliaca / femoral block with ultrasound guidance
- Reduction of:
 - » dislocations, with and without compromise
 - fractures, with and without compromise
- Splinting:
 - limb fractures:
 - o lower
 - o upper
- Soft tissue injury

Spinal injury

- Log roll
- Spinal immobilisation

Toxic injury

- Decontamination
- Gastrointestinal (GI)
- Skir
- Whole bowel irrigation

IMPORTANT SPECIFIC ISSUES

Advanced Trainees will identify important specialty-specific issues and the impact of these on diagnosis and management and integrate these into care.

- Acute treatment of injuries and trauma
- Aeromedical:
 - » safety considerations
 - » transfer
- Expected clinical course and outcome
- First aid procedures
- HAZMAT principles
- Indications and contraindications of varying routes of analgesia:
 - » gaseous
 - » intranasal
 - » intravenous
 - » local anaesthesia:
 - o blocks
 - o topical
 - » oral analgesia
- Non-pharmacological treatment options:
 - » dexmedetomidine
 - » distraction
 - » ketamine:
 - o intramuscular
 - o intravenous
 - » nitrous oxide
 - » oral agents, such as:
 - o clonidine
 - midazolam
 - splints
- Pharmacological treatment options for analgesia
- Preparation and delivery of discharge instructions
- Referral to:
 - » other relevant specialists
 - » radiologist
- Rehabilitation, including:
 - » acute
- Techniques, utility, and limitations of focused ultrasound in guiding paediatric procedures



Knowledge guide 4 – Child safety and maltreatment

Advanced Training in Paediatric Emergency Medicine

KEY PRESENTATIONS AND CONDITIONS

Advanced Trainees will have a comprehensive depth of knowledge of these presentations and conditions.

Presentations

- Child abuse, including, but not limited to:
 - emotional abuse:
 - fabricated illness or induced illness by proxy
 - » neglect
 - » physical abuse
 - » sexual abuse:
 - sexually transmitted infections
- Symptoms and signs of inflicted / non-accidental injury, such as:
 - » abdominal and thoracic injuries
 - » burns
 - » chest injuries
 - » injuries in pre-mobile infants
 - » fractures
 - » genitourinary injuries
 - » head injuries
 - » intra-oral bleeding and injuries
 - » perplexing presentations (PP) and fabricated or induced illness (FII) in children
 - » poisonings
 - » skin and soft tissue injuries, including:
 - o bruises
 - » strangulation and suffocation

For each presentation and condition, Advanced Trainees will **know how to:**

Synthesise

- » recognise the clinical presentation
- » identify relevant epidemiology, prevalence, pathophysiology, and clinical science
- » take a comprehensive clinical history
- » conduct an appropriate examination
- » establish a differential diagnosis
- » plan and arrange appropriate investigations
- » consider the impact of illness and disease on patients¹⁹ and their quality of life when developing a management plan

Manage

- » provide evidence-based management
- » prescribe therapies tailored to patients' needs and conditions
- » recognise potential complications of disease and its management, and initiate preventative strategies
- » involve multidisciplinary teams

Consider other factors

» identify individual and social factors and the impact of these on diagnosis and management

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

Advanced Trainees will have a comprehensive depth of knowledge of the principles of the foundational sciences.

- Biopsychosocial risk factors
- Health needs of children and young people in the care and protection systems, such as:
 - » children in out-of-home care
 - » developmental, medical, and mental health conditions occurring in the population, including those in gateway clinics
- Impact of societal biases in child protection systems
- Legislative requirements
- Population health significance of child maltreatment, and primary, secondary, and tertiary prevention strategies

¹⁹ References to patients in the remainder of this document may include their families, whānau, and/or carers.

- Potential risk factors for harm to children and their siblings within the family / environment
- Protective factors, such as positive relationships and supports, and how they may help modify risk and augment management
- Referral pathways, and community and hospital services for vulnerable children and their families

INVESTIGATIONS, PROCEDURES, AND CLINICAL ASSESSMENT TOOLS

Advanced Trainees will know the scientific foundation of each investigation and procedure, including relevant anatomy and physiology. They will be able to interpret the reported results of each investigation or procedure.

Advanced Trainees will know how to explain the investigation or procedure to patients, families, and carers, and be able to explain procedural risk and obtain informed consent where applicable.

- Consideration of differential diagnosis or pathologies contributing to severity of presentation:
 - » bleeding disorders
 - » bone fragility
 - » drugs
 - » genetic conditions
 - » metabolic conditions
 - toxins
- Imaging (radiology), such as:
 - » bone scan
 - » CT
 - » MRI
 - » radiographic skeletal survey
 - » ultrasound
- Investigations:
 - » differential diagnosis to presentations of child maltreatment
 - » role of investigations to assess for acute injury
- Pathology tests to assess injuries and consider other potential differential diagnosis
- Subspeciality consultations and procedures, including retinal examination
- Time critical forensic specimen collection with chain of evidence / forensic sampling techniques

Physical examination

- Consideration of different injury types and their clinical findings
- Documentation of examination findings using body diagrams and photographs
- Evaluating parent–child interactions regarding emotional maltreatment
- Genital examination, including identification of normal genital development and anatomical variants
- Identification and recognition of the signs of:
 - » child sexual abuse
 - » neglect
 - » physical abuse
- Observe parent–child interaction
- Top-to-toe examinations for the detection of injuries, including the significance of sentinel injuries in young infants and children four years and younger

IMPORTANT SPECIFIC ISSUES

Advanced Trainees will identify important specialty-specific issues and the impact of these on diagnosis and management and integrate these into care.

- Awareness of personal reactions to childhood behaviours, disability, family situations, and illnesses, and the impact these may have on professional practice
- Child rights
- Discussion of sensitive issues with family
- Family dysfunction, including poverty and disadvantages, and the impact of social determinants of health
- · Features of inflicted injury:
 - » history
 - » patterns of injury
 - » risk factors
- Parent and/or carer involvement in shared decision making
- Peer review processes and support

- Principles of advocating for children
- Reporting requirements:
 - ethical, legal, and professional responsibilities around sharing information regarding child safety, harm, and protection
 - » reporting requirements and mandatory reporting obligations
- Psychosocial hazards:
 - » impact of vicarious trauma on clinician wellbeing
 - impact on the long-term health and wellbeing of children involved in the care and protection system
- Medicolegal aspects:
 - » appropriate conduct of an expert witness
 - » courts, and the role of those:
 - o involved in the criminal justice system
 - o responsible for child protection, family law, and appeal
 - » legal considerations for treatment
 - » paediatric medical experts and their role in writing medicolegal reports, contributing to case conferences, and testifying in court in cases of child maltreatment
 - » principles and procedures of forensic sample collection, including collection of biological specimens for DNA analysis
 - » provide evidence to assist investigations, including swabs and photographs

Maltreatment and intergenerational trauma and conflict

- Intergenerational trauma and conflict:
 - » child maltreatment presentations, such as:
 - o exaggeration
 - o fabrication
 - o falsification
 - induction of illness or symptoms
 - » emotional maltreatment
 - » exposure to interpersonal violence
 - » neglect
 - » special consideration of all injuries in non-ambulatory infants
 - » unexplained or repeated incidents of inflicted / non-accidental injury, such as:
 - o abdominal and thoracic injuries
 - o burns
 - o child sexual abuse
 - o fractures
 - o head injuries
 - intraoral injuries
- Maltreatment:
 - behavioural or emotional presentation as a consequence of current or previous maltreatment, and the impact of neglect over time
 - » different types of child maltreatment and child neglect:
 - o educational
 - o emotional
 - o medical
 - o physical
 - supervisory
 - » effective prevention of child maltreatment
 - » effects on children of being a perpetrator, victim, or witness of violence
 - » enablers and barriers to obtaining information in child maltreatment situations
 - » family and domestic violence
 - » local, state, and national policies, procedures, and services related to child protection
 - » management of physical and emotional maltreatment
 - » methods involved in developing a differential diagnosis for maltreatment victims

Specific management issues

- Appropriate injury reporting, separate to reporting to child safety agencies, such as making an ACC claim in Aotearoa New Zealand
- Disclosure and history-taking environment must be safe, including culturally safe, taking into consideration:
 - age
 - developmental stage
- Safe environment post-disclosure
- Referrals:
 - appropriate referral pathways to ensure time-critical specimens are collected within the appropriate timeframe, and non-time-critical specimens are performed in a planned, coordinated manner
 - non-accidental injury and appropriate referral processes, such as knowing legislative processes and keeping thorough documentation
 - mental health / social support referrals as appropriate and available
- Sexual health:
 - emergency contraception provision and counselling
 - sexually transmitted infection testing, and post-exposure prophylaxis



Knowledge guide 5 – Psychiatric and behavioural disturbance

Advanced Training in Paediatric Emergency Medicine

KEY PRESENTATIONS AND CONDITIONS

Advanced Trainees will have a comprehensive depth of knowledge of these presentations and conditions.

Presentations

- Deliberate self-harm
- Psychiatric disorders, acute
- Overdose / Intentional poisoning
- Suicide attempts, or risk of
- Undifferentiated acute behavioural disturbance

Conditions

- Attention deficit hyperactivity disorder (ADHD)
- Anxiety
- Autism spectrum disorder
- Behavioural and psychiatric:
 - » agitation
 - » confusion
 - » deliberate self-harm
 - » substance abuse
- Depression
- Eating disorders
- Intellectual disability and developmental delay with behavioural disturbance
- Organic disorders causing behavioural disturbance, including, but not limited to:
 - » brain tumours
 - » encephalitis
 - » epilepsy
 - » pain
 - » sepsis
- Psychosis

LESS COMMON OR MORE COMPLEX PRESENTATIONS AND CONDITIONS

Advanced Trainees will understand these presentations and conditions.

Advanced Trainees will understand the resources that should be used to help manage patients with these presentations and conditions.

Presentations and conditions

- Attachment disorder
- Cannabis hyperemesis syndrome
- Fabricated illness or induced illness by proxy
- Functional disorder
- Personality disorder
- Psychosis, acute
- Somatisation disorder

For each presentation and condition, Advanced Trainees will **know how to:**

Synthesise

- » recognise the clinical presentation
- » identify relevant epidemiology, prevalence, pathophysiology, and clinical science
- » take a comprehensive clinical history
- » conduct an appropriate examination
- » establish a differential diagnosis
- » plan and arrange appropriate investigations
- » consider the impact of illness and disease on patients²⁰ and their quality of life when developing a management plan

Manage

- » provide evidence-based management
- » prescribe therapies tailored to patients' needs and conditions
- » recognise potential complications of disease and its management, and initiate preventative strategies
- » involve multidisciplinary teams

Consider other factors

» identify individual and social factors and the impact of these on diagnosis and management

²⁰ References to patients in the remainder of this document may include their families, whānau, and/or carers.

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

Advanced Trainees will have a comprehensive depth of knowledge of the principles of the foundational sciences.

- Toxicology:
 - » ADHD epidemiology and medications
 - » antipsychotics and use in acute behavioural concerns
 - » chemical sedation and:
 - o appropriate patient populations
 - o benefits
 - minimum standards of monitoring throughout
 - o risks
 - » common overdoses, including their antidotes, pathophysiological effects, and presentation, including, but not limited to:
 - o alcohol
 - o antidepressants
 - o aspirin
 - o ecstasy
 - o methamphetamines
 - o paracetamol
 - » life-threatening overdoses
 - » unclear toxin
 - » toxidromes

INVESTIGATIONS, PROCEDURES, AND CLINICAL ASSESSMENT TOOLS

Advanced Trainees
will know the scientific
foundation of each
investigation and
procedure, including
relevant anatomy and
physiology. They will
be able to interpret the
reported results of each
investigation or procedure.

Advanced Trainees will know how to explain the investigation or procedure to patients, families, and carers, and be able to explain procedural risk and obtain informed consent where applicable.

Investigations

- Blood results related to behaviourally disturbed or toxicology patients:
 - » blood gas results
 - » for assessing risk in patients with eating disorders
 - » specific drug levels, such as paracetamol and iron
- ECG:
 - » patient groups:
 - o behaviourally disturbed
 - eating disorders
 - toxicology patients
 - » to assess for organic cause
- Specific investigations for:
 - » aggressive / scared or heightened patients
 - excluding underlying organic cause for presentation
 - » overdose patients, to determine type and severity of overdose

Procedures

- Chemical restraint:
 - » intramuscular
 - » intravenous
 - » ora
- De-escalation of disturbance in individuals across the age ranges
- Intravenous / Venepuncture cannulation
- Lumbar puncture for patients with possible organic cause for behavioural disturbance
- Nasogastric (NG) insertion for:
 - » decontamination
 - » NG feeding
 - NG medication administration
- Non-chemical restraint
- Urinary catheterisation for enhanced elimination

Clinical assessment

- Acute suicide risk
- Assessments to exclude underlying organic cause for presentation
- Medical stability in eating disorder patients
- Mental state examination
- Physical examination to assess for organic cause for behavioural disturbance

IMPORTANT SPECIFIC ISSUES

Advanced Trainees will identify important specialty-specific issues and the impact of these on diagnosis and management and integrate these into care.

- Acute mental health impacts of other diseases, such as chronic disease or life-limiting disease
- Addiction:
 - » drugs of addiction
 - » in eating disorders
 - » management of addiction
- First presentation at emergency department of acute psychiatric disorders
- Local referral pathways for young children with behavioural concerns
- Medicolegal:
 - » legal framework regarding ADHD medications
 - » legal status of duty of care, mental health acts, and restraint
- Possible contributors to behaviour:
 - » bullying
 - » family dynamics
 - » exposure to parental use of drugs and alcohol
 - » role of social media
 - » peer group interactions
- Recognition of maternal / parental mental health crisis as factors in child presentations to health services
- Recreational substance abuse
- Treatment:
 - antipsychotic and anti-anxiety medications, and administration with psychiatric specialist support
 - » restraint versus sedation, especially in the uncooperative child
 - » treatment pathways for acute mental health paediatric patients, including:
 - o legal implications
 - o safe transfer (if required)
 - o units suitable for admission
 - * treatment pathways for long-term increasing disturbance, behavioural outbursts, and self-harm in neurodiverse patients