

Advanced Training Curricula Renewal

DRAFT Curriculum standards

Advanced Training in Medical Oncology (Paediatrics and Child Health)

November 2023



About this document

This document outlines the curriculum standards for Advanced Training in Medical Oncology (Paediatrics and Child Health) for trainees and supervisors.

The curriculum standards should be used in conjunction with the Advanced Training in Medical Oncology (Paediatrics and Child Health) learning, teaching, and assessment programs.

For more information or to provide feedback contact curriculum@racp.edu.au.

Contents

Program overview	3
Purpose of Advanced Training	3
Specialty overview	3
Advanced Training curricula standards	5
Professional Practice Framework.....	6
Learning, teaching, and assessment structure	7
Curriculum standards	8
Competencies.....	8
Entrustable Professional Activities	15
Knowledge guides.....	58

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 New Zealand.



Specialty overview

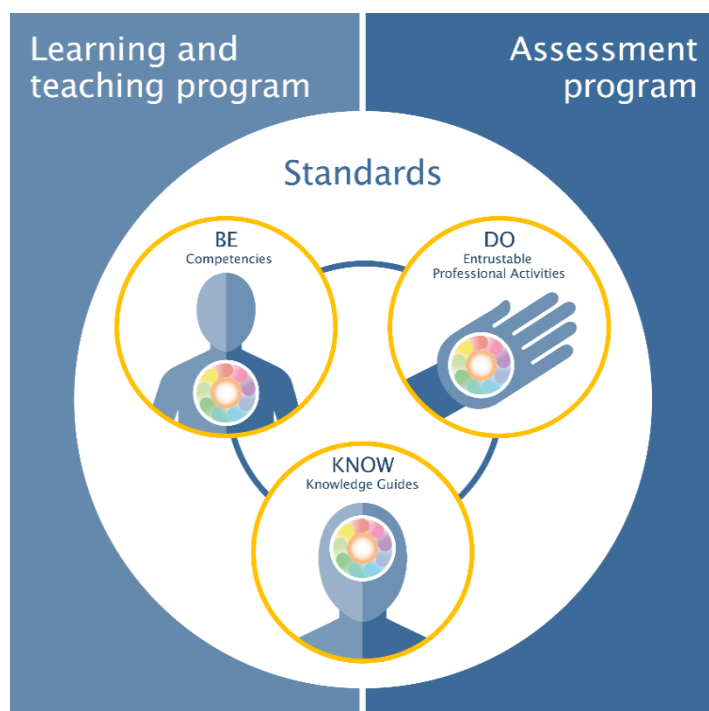
Paediatric medical oncologists specialise in the investigation, study, diagnosis, management, and treatment of infants, children and adolescents with a predisposition to, suspected or confirmed benign and malignant growths, tumours, cancers, and diseases, including blood disorders. They also provide consultation to and care for patients requiring haematopoietic stem cell transplantation or cellular therapies.

Paediatric medical oncologists exhibit these key attributes and skills to diagnose, treat and support patients with cancer, and other conditions:

- **Expert diagnostic skills.** Paediatric medical oncologists manage the symptoms of cancer and other disorders treated, including developing optimal treatment plans for cancer patients and the side effects of cancer treatments. Paediatric medical oncologists must be able to effectively determine which type of cancer / benign neoplasm their patients have and stage them appropriately. A correct diagnosis is essential to ensure correct treatment is delivered.
- **Broad clinical experience and skills.** Paediatric medical oncology is a multidisciplinary specialty that requires proficiency in medical sciences, clinical medicine, diagnostic medicine, and pharmacology. Paediatric medical oncology requires a breadth of clinical experience and skills in caring for acute medical problems and chronic illness, patients' and families' emotional needs, symptom control, and end-of-life care.

- **Evidence-based treatment and therapy.** Paediatric medical oncologists use a broad range of preventative, potentially curative and palliative medicines such as chemotherapy, immunotherapy, molecular targeted agents, cellular therapy, analgesics and other supportive care medication. A key role of a paediatric medical oncologist is to assess and manage patients' additional symptoms related to cancer, as well as complications that may arise through treatment, such as pain and infections using effective evidence-based techniques.
- **Research.** Paediatric medical oncologists contribute to cancer research (therapeutics, biology, epidemiology and clinical outcomes research). This includes health education and clinical teaching and ethics. Cancer research is constantly evolving, so paediatric medical oncologists must stay on top of current research and studies to be effective in their positions. The type of research often involves attending medical conferences, reading industry journals and reports, and going to annual training workshops to stay informed on the most recent cancer treatments and methods. Enrolment and management on clinical trials is an integral part of paediatric medical oncology.
- **Lead and work in a multidisciplinary team.** Paediatric medical oncology care is multidisciplinary. Paediatric medical oncologists lead multidisciplinary teams, coordinating the contributions of different healthcare professionals to provide patients with holistic care. This requires the ability to work in a team as well as excellent communication skills with other team members.
- **Interpersonal and communication skills.** Cancer patients and their family/carer experience one of the most emotionally vulnerable times of their lives when they are diagnosed with cancer. Paediatric medical oncologists must use compassion, empathy, clear and responsive communication techniques, and care and support their patients and families/ carers throughout the trajectory of their illness and survivorship till transition.
- **Teaching.** Paediatric medical oncologists roles include teaching responsibilities, training junior doctors, medical students and allied healthcare professionals and educating patients about their conditions.

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.

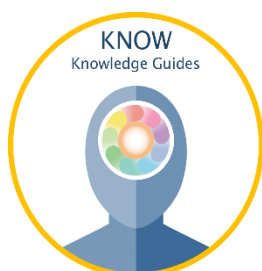
The **curricula standards** outline the educational objectives of the training program and the standard against which trainees' abilities are measured.



- **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.

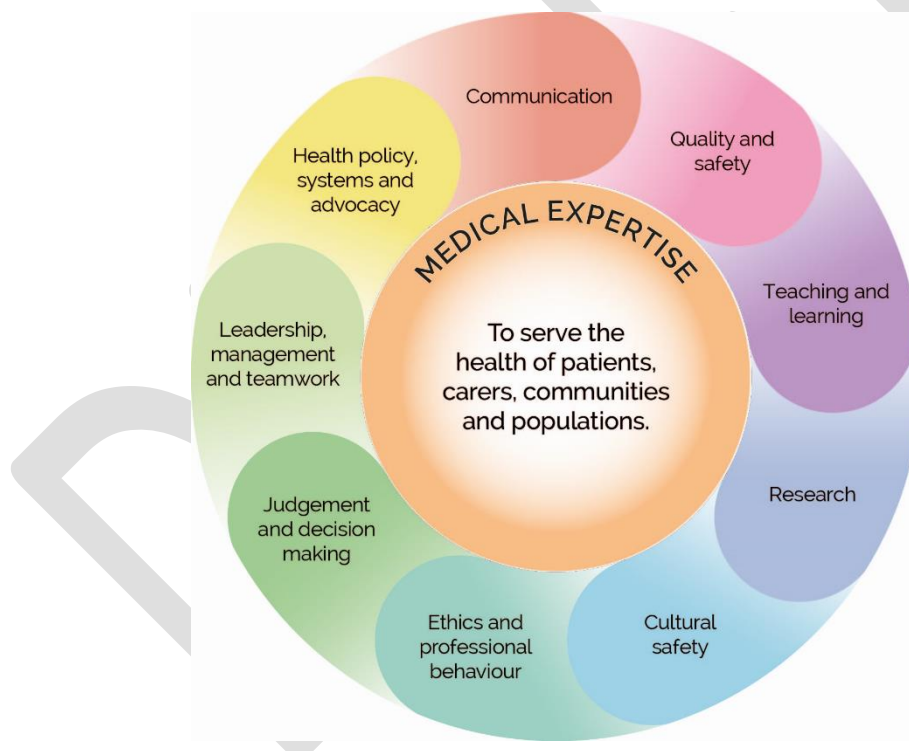
Common curricula standards

The renewed curricula for Advanced Training will consist of a mix of program-specific content and content that is common across Advanced Training programs.

- **Competencies** will be common across Advanced Training programs.
- **Entrustable Professional Activities (EPAs)** will contain a mix of content that is common and content that is program-specific.
- **Knowledge Guides** will be program-specific, although content may be shared between complementary programs.

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.

The Advanced Training program may be started once the prospective trainee has completed the entry requirements. This includes completion of Basic Physician Training required for Divisional Advanced Training programs.

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, or carers¹, and in collaboration with the health care team.

² References to patients in the remainder of this document may include their families 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 health³ 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.

² Adapted 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.

³ Adapted 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 health care 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.⁴

This is a placeholder for the competencies in the cultural safety domain, which are in development and will be added at a later date.

⁴ The RACP has adopted the Medical Council of New Zealand's definition of cultural safety (below): Cultural safety can be defined as:

- 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 health professionals and health care 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.

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 and their families 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 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

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



#	Theme	Title
1	<u>Team leadership</u>	Lead a team of health professionals
2	<u>Supervision and teaching</u>	Supervise and teach professional colleagues
3	<u>Quality improvement</u>	Identify and address failures in health care delivery
4	<u>Clinical assessment and management of oncological and haematological conditions</u>	Clinically assess and manage the ongoing care of patients
5	<u>Acute paediatric oncology care</u>	Manage the early care of acutely unwell patients
6	<u>Longitudinal care</u>	Manage and coordinate the longitudinal care of patients over the course of their condition, including transitions to survivorship and long-term follow-up
7	<u>Communication with patients</u>	Discuss diagnoses and management plans with patients
8	<u>Prescribing</u>	Prescribe therapies tailored to patients' needs and conditions
9	<u>Investigations and procedures</u>	Select, organise, and interpret investigations, and plan, prepare for, perform, and provide aftercare for important practical procedures
10	<u>Critical appraisal of evidence</u>	Critical appraisal of evidence to provide the best cancer care, ensuring patient safety, wise allocation of resources, and advancement of research through evidence-based practice

EPA 1: Team leadership

Theme	Team leadership		AT-EPA-01
Title	Lead a team of health professionals		
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none"> • prioritise workload • organise multiple concurrent tasks • articulate individual responsibilities, expertise, and accountability of team members • identify the range of team members' skills, expertise, and roles • ascertain and apply leadership techniques in daily practice • collaborate with and motivate team members • promote and adopt insights from team members • act as a role model. 		
Behaviours			
	Ready to perform without supervision	Requires some supervision	
Professional practice framework domain	<p>Expected behaviours of a trainee who can routinely perform this activity without needing supervision</p> <p>The trainee will:</p>	<p>Possible behaviours of a trainee who needs some supervision to perform this activity</p> <p>The trainee may:</p>	
Medical expertise	<ul style="list-style-type: none"> • synthesise information with other disciplines to develop optimal, goal-centred plans for patients • 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 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • provide support and motivate patients or populations and health professionals by effective communication • demonstrate a transparent, consultative style by engaging patients, relevant professionals and/or the public in shared decision making • work with patients and other health professionals to resolve conflict that may arise when planning and aligning goals • demonstrate rapport with people by tailoring messages to different stakeholders 	<ul style="list-style-type: none"> • communicate adequately with colleagues, patients and the public • respect the roles of team members 	

	<ul style="list-style-type: none"> • lead multidisciplinary discussions about patients' cases and management 	
Quality and safety	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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
Teaching and learning	<ul style="list-style-type: none"> • regularly self-evaluate personal professional practice, and implement changes based on the results • actively seek feedback from supervisors and colleagues on performance • 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 • participate in local, national, international organisations/ meetings and/or craft groups e.g. ANZCHOG 	<ul style="list-style-type: none"> • 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 • attend local, national, international meetings and craft groups
Cultural safety	<ul style="list-style-type: none"> • 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, ethnicity, cultural beliefs and socioeconomic background on decision making 	<ul style="list-style-type: none"> • demonstrate awareness of cultural diversity and unconscious bias • work effectively and respectfully with people from different cultural backgrounds
Ethics and professional behaviour	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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

	<ul style="list-style-type: none"> effectively consult with stakeholders, achieving a balance of alternative views acknowledge personal conflicts of interest and unconscious bias act collaboratively to resolve behavioural incidents and conflicts such as harassment and bullying 	<ul style="list-style-type: none"> work effectively as a member of a team promote team values of honesty, discipline and commitment to continuous improvement demonstrate understanding of the negative impact of workplace conflict
Judgement and decision making	<ul style="list-style-type: none"> 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 decisions that benefit health care delivery 	<ul style="list-style-type: none"> monitor services and provide appropriate advice review new healthcare interventions and resources interpret appropriate data and evidence for decision making
Leadership, management, and teamwork	<ul style="list-style-type: none"> combine team members' skills and expertise in delivering patient care and/or population advice develop and lead effective multidisciplinary teams by developing and implementing strategies to motivate others build effective relationships with multidisciplinary team members to achieve optimal outcomes ensure all members of the team are accountable for their individual practice take responsibility for own actions 	<ul style="list-style-type: none"> acknowledge the range of personal and other team members' skills, expertise, and roles acknowledge and respect the contribution of all health professionals involved in patients' care participate effectively and appropriately in multidisciplinary teams seek out and respect the perspectives of multidisciplinary team members when making decisions
Health policy, systems, and advocacy	<ul style="list-style-type: none"> engage in appropriate consultation with stakeholders on the delivery of healthcare advocate for the resources and support for healthcare teams to achieve organisational priorities influence the development of organisational policies and procedures to optimise health outcomes identify the determinants of health of the population, and mitigate barriers to access to care remove self-interest from solutions to health advocacy issues 	<ul style="list-style-type: none"> communicate with stakeholders within the organisation about healthcare delivery understand methods used to allocate resources to provide high-quality care promote the development and use of organisational policies and procedures

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: <ul style="list-style-type: none"> • facilitate 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 • promote learners to be self-directed and identify learning experiences • facilitate learners in day-to-day work, and provide feedback • support learners to prepare for assessments. 		
Behaviours			
	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 The trainee will:	Possible behaviours of a trainee who needs some supervision to perform this activity The trainee may:	
Medical expertise	<ul style="list-style-type: none"> • 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 the learner to consider the rationale and appropriateness of investigation and management options • act as a role model demonstrating a flexible, holistic, reflective, evidence-based approach to practice • demonstrate the required knowledge, skills and attitudes to provide appropriate teaching, learning opportunities, supervision, assessment and mentorship 	<ul style="list-style-type: none"> • teach learners using basic knowledge and skills 	
Communication	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • demonstrate accessible, supportive, and compassionate behaviour 	

- encourage learners to tailor communication as appropriate for different patients, such as younger or older people, and different populations
- support learners to deliver clear, concise and relevant information in both verbal and written communication
- listen and convey information clearly and considerately

Quality and safety

- support learners to deliver quality care while maintaining their own wellbeing
- apply lessons learned about patient safety by identifying and discussing risks with learners
- 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
- observe learners to reduce risks and improve health outcomes

Teaching and learning

- demonstrate knowledge of the principles, processes, and skills of supervision
- provide direct guidance to learners in day-to-day work
- work with learners to identify professional development and learning opportunities based on their individual learning needs
- offer feedback and role modelling
- participate in teaching and supervision of professional development activities
- encourage self-directed learning and assessment
- 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
- demonstrate basic skills in the supervision of learners
- apply a standardised approach to teaching, assessment, and feedback considering individual learner needs
- implement teaching and learning activities that are aligned to learning goals
- adopt a teaching style that encourages learner self-directedness

Research	<ul style="list-style-type: none"> clarify junior colleagues' research project goals and requirements, and provide feedback regarding the merits or challenges of proposed research monitor the progress of learners' research projects regularly, and 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 	<ul style="list-style-type: none"> guide learners with respect to the choice of research projects ensure that the research projects planned are feasible and of suitable standards
Cultural safety	<ul style="list-style-type: none"> role model a culturally appropriate approach to teaching encourage learners to seek out opportunities to develop and improve their own cultural competence encourage learners to consider culturally appropriate care of Māori and Aboriginal and Torres Strait Islander peoples into patients' management consider cultural, ethical, and religious values and beliefs in teaching and learning 	<ul style="list-style-type: none"> function effectively and respectfully when working with and teaching with people from different cultural backgrounds
Ethics and professional behaviour	<ul style="list-style-type: none"> apply principles of ethical practice to teaching scenarios act as a role model to promote professional responsibility and ethics among learners respond appropriately to learners seeking professional guidance 	<ul style="list-style-type: none"> demonstrate professional values, including commitment to high-quality clinical standards, compassion, empathy, and respect provide learners with feedback to improve their experiences
Judgement and decision making	<ul style="list-style-type: none"> prioritise workloads and manage learners with different levels of professional knowledge or experience link theory and practice when explaining professional decisions promote joint problem solving 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 	<ul style="list-style-type: none"> provide general advice and support to learners use health data logically and effectively to investigate difficult diagnostic problems
Leadership, management, and teamwork	<ul style="list-style-type: none"> maintain professional, clinical, research, and/or administrative responsibilities while teaching 	<ul style="list-style-type: none"> demonstrate the principles and practice of professionalism and leadership in health care

	<ul style="list-style-type: none"> • create an inclusive environment whereby the learner feels part of the team • help shape organisational culture to prioritise quality and work safety through openness, honesty, shared learning, and continued improvement • leads in multidisciplinary teams promoting an open culture of learning and accountability by challenging and inspiring colleagues, supporting the development of leadership qualities and critical decision-making skills 	<ul style="list-style-type: none"> • participate in mentor programs, career advice, and general counselling
Health policy, systems, and advocacy	<ul style="list-style-type: none"> • advocate for suitable resources to provide quality supervision and maintain training standards • explain the value of health data in the care of patients or populations • support innovation in teaching and training • know about and work with local, national and international advocacy and policy organisations 	<ul style="list-style-type: none"> • start to integrate public health principals into teaching and practice

EPA 3: Quality improvement

Theme	Quality improvement	AT-EPA-03
Title	Identify and address failures in health care delivery	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none"> • identify and report actual and potential (near miss) errors • perform and evaluate system improvement activities • comply to best practice guidelines • inspect clinical guidelines and outcomes • enhance to the development of policies and protocols designed to protect patients and enhance healthcare • monitor own practice and develop individual improvement plans. 	
Behaviours		
Professional practice framework domain	Ready to perform without supervision	Requires some supervision
	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
Medical expertise	The trainee will:	The trainee may:
	<ul style="list-style-type: none"> • regularly review patients' or population health outcomes to identify opportunities for improvement in delivering appropriate care • perform audits to identify areas of improvement in healthcare and preferably perform reaudits to see the impact • evaluate environmental and lifestyle health risks, and advocate for healthy lifestyle choices • use standardised protocols to adhere to best practice and prevent the occurrence of wrong-site, wrong-patient procedures • enrol patients on appropriate clinical trials and adhere to them as per good clinical practice • regularly monitor personal professional performance 	<ul style="list-style-type: none"> • 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 • be aware of appropriate clinical trials
Communication	<ul style="list-style-type: none"> • support patients to have access to, and use, easy-to-understand, high-quality information about health care • support patients to share decision making about their own health care, to the extent they choose • assist patients' access to their health information, as well as complaint and feedback systems 	<ul style="list-style-type: none"> • demonstrate awareness of the evidence for consumer engagement and its contribution to quality improvement in healthcare • apply knowledge of how health literacy might affect the way patients or populations gain access to, understand, and use health information • understand informed consent processes for procedures and clinical trials

	<ul style="list-style-type: none"> • discuss with patients any safety and quality concerns they have relating to their care • manage complaints appropriately according to local policies • implement the organisation's open disclosure policy • consent families in an informed consent process to appropriate procedures, clinical trials, other processes 	
Quality and safety	<ul style="list-style-type: none"> • demonstrate safety skills, including infection control, adverse event reporting, and effective clinical handover • 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 of adverse events and 'near misses', including reporting such events • ensure that identified opportunities for improvement are raised and reported appropriately • use clinical audits and registries of data on patients' experiences and outcomes, learnings from incidents, and complaints to improve healthcare • participate in local, national and international clinical trials for the best outcome for the patient and ongoing improved practice for all 	<ul style="list-style-type: none"> • demonstrate understanding of a systematic approach to improving the quality and safety of healthcare • demonstrate an understanding of the importance of standards of practice, clinical trials
Teaching and learning	<ul style="list-style-type: none"> • translate quality improvement approaches and methods into practice • 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 	<ul style="list-style-type: none"> • work within organisational quality and safety systems for the delivery of clinical care • use opportunities to learn about safety and quality theory and systems
Research	<ul style="list-style-type: none"> • ensure 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 • can take informed consent for research 	<ul style="list-style-type: none"> • understand 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	<ul style="list-style-type: none"> undertake professional development opportunities that address the impact of cultural bias on health outcomes 	<ul style="list-style-type: none"> communicate effectively with patients from culturally and linguistically diverse backgrounds
Ethics and professional behaviour	<ul style="list-style-type: none"> align improvement goals with the priorities of the organisation contribute to developing an organisational culture that enables and prioritises patients' safety and quality 	<ul style="list-style-type: none"> comply with professional regulatory requirements and codes of conduct
Judgement and decision making	<ul style="list-style-type: none"> use decision-making support tools, such as guidelines, protocols, pathways, and reminders analyse and evaluate current care processes to improve healthcare 	<ul style="list-style-type: none"> access information and advice from other health practitioners to identify, evaluate, and improve patients' care management
Leadership, management, and teamwork	<ul style="list-style-type: none"> 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 actively involve clinical pharmacists in the medication-use process take responsibility for investigating, reporting, resolving and evaluating risk/hazard incidents 	<ul style="list-style-type: none"> demonstrate attitudes of respect and cooperation among members of different professional teams partner with clinicians and managers to ensure patients receive appropriate care and information on their care
Health policy, systems, and advocacy	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> » defining the scope of clinical practice » performance monitoring and management » clinical, and safety and quality education and training 	<ul style="list-style-type: none"> maintain a dialogue with service managers about issues that affect patient care contribute to relevant organisational policies and procedures help shape an organisational culture that prioritises safety and quality through openness, honesty, learning, and quality improvement

EPA 4: Clinical assessment and management of oncological and haematological conditions

Theme	Clinical assessment and management of oncological and haematological conditions	AT-EPA-04
Title	Clinically assess and manage the ongoing care of patients	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none"> • identify and access sources of relevant information about patients • retrieve patient histories • examine patients • synthesise findings to develop provisional and differential diagnoses • discuss findings with patients • generate a management plan • present findings to other health professionals. 	
Behaviours		
Professional practice framework domain	Ready to perform without supervision	Requires some supervision
	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
Medical expertise	The trainee will:	The trainee may:
	<ul style="list-style-type: none"> • practice independently in a safe manner • elicit an accurate, organised, and problem-focused medical history considering physical, psychosocial, and risk factors • perform a full physical examination to establish the nature and extent of problems • synthesise and interpret findings from the history and examination to devise the most likely provisional diagnoses via reasonable differential diagnoses • recognise, assess, and manage acute general oncological issues e.g. toxicity from treatment, including: <ul style="list-style-type: none"> ➢ febrile neutropenia infections ➢ serious presenting issues as described in acute care • develop management plans based on relevant guidelines and current literature, and consider the balance of benefit and harm by taking patients' personal set of circumstances into account • work within multidisciplinary teams including other medical specialities and allied health 	<ul style="list-style-type: none"> • take patient-centred histories, considering psychosocial factors • perform accurate physical examinations • recognise and correctly interpret abnormal findings • synthesise pertinent information to direct the clinical encounter and diagnostic categories • develop appropriate management plans • recognise serious medical issues including treatment toxicity, and escalate appropriately

	<ul style="list-style-type: none"> • apply knowledge of the clinical and biomedical sciences relevant to the oncological and haematological condition 	
Communication	<ul style="list-style-type: none"> • communicate openly, listen, and take patients' concerns seriously, giving them adequate opportunity to ask questions • provide information to patients to enable them to make a fully informed decision from various diagnostic, therapeutic, and management options 	<ul style="list-style-type: none"> • anticipate, read, and respond to verbal and non-verbal cues • demonstrate active listening skills • communicate patients' situations promptly to colleagues, including senior clinicians
	<ul style="list-style-type: none"> • communicate clearly, effectively, respectfully, and promptly with other health professionals involved in patients' care • plan and manage patients' transitions appropriately, considering the disease type/stage, and treatment required • explain diagnosis in context of giving 'bad news' 	
Quality and safety	<ul style="list-style-type: none"> • demonstrate safety skills, including infection control, adverse event reporting and effective clinical handover • recognise and effectively deal with aggressive and violent patient behaviours through appropriate training • obtain informed consent before undertaking any investigation or providing treatment, except in an emergency • ensure patients are informed of the material risks associated with any part of proposed management plans • participate in local, national and international clinical trials for the best outcome for the patient and ongoing improved practice for all • present patients at multidisciplinary meetings and follow MDM consensus 	<ul style="list-style-type: none"> • perform hand hygiene, and take infection control precautions at appropriate moments • document history and physical examination findings, and synthesise with clarity and completeness • provide care in accordance with current guidelines
Teaching and learning	<ul style="list-style-type: none"> • set defined objectives for clinical teaching encounters, and solicit feedback on mutually agreed goals • regularly reflect upon and self-evaluate professional development • obtain informed consent before involving patients in teaching activities 	<ul style="list-style-type: none"> • set clear goals and objectives for self-learning • self-reflect frequently • deliver teaching considering learners' level of training

	<ul style="list-style-type: none"> • turn clinical activities into an opportunity to teach, appropriate to the setting • incorporate teaching into daily clinical activities 	
Research	<ul style="list-style-type: none"> • search for, find, compile, analyse, interpret, and evaluate information relevant to the research subject • enrol via informed consent process onto appropriate clinical trials 	<ul style="list-style-type: none"> • refer to guidelines and medical literature to assist in clinical assessments when required • consider available evidence, guidelines, and clinical trials • demonstrate an understanding of the limitations of evidence and the challenges of applying research in daily practice
Cultural safety	<ul style="list-style-type: none"> • use plain-language patient education materials, and demonstrate cultural and linguistic sensitivity • demonstrate effective and culturally competent communication and care for Māori and Aboriginal and Torres Strait Islander peoples, and members of other cultural groups • use a professional interpreter, health advocate, or a family or community member to assist in communication with patients, and understand the potential limitations of each acknowledge patients' beliefs and values, and how these might impact on health 	<ul style="list-style-type: none"> • display respect for patients' cultures, and attentiveness to social determinants of health • display an understanding of at least the most prevalent cultures in society, and an appreciation of their sensitivities • appropriately access interpretive or culturally focused services
Ethics and professional behaviour	<ul style="list-style-type: none"> • demonstrate professional values, including compassion, empathy, respect for diversity, integrity, honesty, and partnership to all patients • hold information about patients in confidence, unless the release of information is required by law or public interest • assess patients' capacity for decision making, involving a proxy decision maker appropriately 	<ul style="list-style-type: none"> • demonstrate professional conduct, honesty, and integrity • consider patients' decision-making capacity • identify patients' preferences regarding management and the role of families in decision making • not advance personal interest or professional agendas at the expense of patient or social welfare
Judgement and decision making	<ul style="list-style-type: none"> • apply knowledge and experience to identify patients' problems, making logical, rational decisions, and acting to achieve positive outcomes for patients • use a holistic approach to health considering comorbidity, uncertainty, and risk • use the best available evidence for the most effective therapies and interventions to ensure quality care 	<ul style="list-style-type: none"> • demonstrate clinical reasoning by gathering focused information relevant to patients' care • recognise personal limitations and seek help in an appropriate way when required

Leadership, management, and teamwork	<ul style="list-style-type: none"> work effectively as a member of multidisciplinary teams to achieve the best health outcome for patients demonstrate awareness of colleagues in difficulty, and work within the appropriate structural systems to support them while maintaining patient safety 	<ul style="list-style-type: none"> share relevant information with members of the health care team
Health policy, systems, and advocacy	<ul style="list-style-type: none"> participate in health promotion, disease prevention and control, screening, and reporting notifiable diseases aim to achieve the optimal cost-effective patient care to allow maximum benefit from the available resources 	<ul style="list-style-type: none"> identify and navigate components of the healthcare system relevant to patients' care identify and access relevant community resources to support patient care

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EPA 5: Acute paediatric oncology care

Theme	Acute care	AT-EPA-05
Title	Manage the early care of acutely unwell patients	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none"> • assess seriously unwell patients, including pain, and initiate management • recognise clinical deterioration, and respond by following the local process for escalation of care • recognise and manage acutely unwell patients who require resuscitation • coordinate the resuscitation team initially, and involve other necessary services • communicate with transport services and medical teams • perform this activity in inpatient or outpatient settings, including day unit. 	
Behaviours		
Professional practice framework domain	Ready to perform without supervision	Requires some supervision
	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
Medical expertise	The trainee will:	The trainee may:
	<ul style="list-style-type: none"> • recognise immediate life-threatening conditions and deteriorating and critically unwell patients, and respond appropriately • perform advanced life support, according to resuscitation council guidelines, to a high level of advanced resuscitation skills • demonstrate knowledge of potential risks and complications of resuscitation • effectively assess, diagnose, and manage acute undifferentiated clinical presentations • effectively assess, diagnose and manage specific oncological and haematological new diagnoses and emergencies • 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 • manage escalations, de-escalations or transitions of care in a proactive and timely manner 	<ul style="list-style-type: none"> • recognise seriously unwell patients requiring immediate care • escalate care expediently to senior staff for any acute or concerning issues • apply advanced life support as indicated • recognise general medical principles of caring for patients with undifferentiated and undiagnosed conditions • 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 • assess perioperative and periprocedural patients

	<ul style="list-style-type: none"> • develop plans of multidisciplinary treatment, rehabilitation, and secondary prevention following acute events • provide clear and effective discharge summaries with recommendations for ongoing care • optimise medical management before, during, and after operations • optimise supportive care, including for pain, palliative care issues 	
Communication	<ul style="list-style-type: none"> • communicate clearly with other team members, and coordinate efforts of multidisciplinary team members. This includes working closely with other medical specialists • use closed-loop and clear communication with other health care team members during resuscitation • facilitate early communication with patients, families, and health care team members to allow shared decision making • negotiate and review realistic treatment goals, and determine and explain the expected prognoses and outcomes • employ developmentally appropriate communication strategies appropriate for children/adolescent and young adult (AYA) and those with cognitive difficulties • maintain respect for parent/family wishes in regard to communications with their child/AYA • explain the situation to patients in a sensitive and supportive manner, avoiding jargon and confirming their understanding • determine the level of health literacy of individual patients and level of understanding of agreed care decisions 	<ul style="list-style-type: none"> • demonstrate communication skills to sufficiently support the function of multidisciplinary teams • determine patients' understanding of their diseases and what they perceive as the most desirable goals of care • communicate appropriately to age and developmental stage of the patient, and to parents • recognise adolescents and young adults as a specific group with specific communication needs. • utilise interpreters
Quality and safety	<ul style="list-style-type: none"> • maintain up-to-date certification in advanced life support • maintain up to date knowledge of acute oncological and haematological conditions, including specific toxicities from new therapies such as immune mediated toxicities • use clinical information technology systems for conducting 	<ul style="list-style-type: none"> • 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

	<p>prospective and retrospective clinical audits</p> <ul style="list-style-type: none"> • evaluate and explain the benefits and risks of clinical interventions based on individual patients' circumstances • analyse adverse incidents and sentinel events to identify system failures and contributing factors • identify evidence-based practice gaps using clinical indicators, and implement changes to improve patients' outcomes • coordinate and encourage innovation, and objectively evaluate improvement initiatives for outcomes and sustainability 	<p>the workplace, and identify gaps in their structure</p>
Teaching and learning	<ul style="list-style-type: none"> • demonstrate effective supervision skills and teaching methods which 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 the encounter and improve future patients' care • seek opportunities to debrief after serious acute events 	<ul style="list-style-type: none"> • 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 the wards
Research	<ul style="list-style-type: none"> • select studies based on optimal trial design, freedom from bias, and precision of measurement • evaluate the value of treatments in terms of relative and absolute benefits, cost, potential patient harm, and feasibility • evaluate the applicability of the results of clinical studies to the circumstances of individual patients, especially those with multiple comorbidities • specify research evidence to the needs of individual patients 	<ul style="list-style-type: none"> • demonstrate efficient searching of literature databases to retrieve evidence • use information from credible sources to aid in decision making • 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	<ul style="list-style-type: none"> • 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 Māori and Aboriginal and Torres Strait Islander peoples into patients' management 	<ul style="list-style-type: none"> • practise cultural competency appropriate for the community serviced • proactively identify barriers to access to healthcare

	<ul style="list-style-type: none"> consider cultural, ethical, and religious values and beliefs in leading multidisciplinary teams 	
Ethics and professional behaviour	<ul style="list-style-type: none"> develop management plans that are 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 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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> recognise the need for escalation or de-escalation of care, and refer 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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 journey lead a team by providing engagement while maintaining a focus on outcomes 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> use a considered and rational approach to the responsible use of resources, balancing costs against outcomes prioritise patient care based on need, and consider available healthcare resources 	<ul style="list-style-type: none"> understand the systems for the escalation of care for deteriorating patients understand the role of clinician leadership and advocacy in appraising and redesigning systems

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- collaborate with emergency medicine staff and other colleagues to develop policies and protocols for the investigation and management of common acute medical problems
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of care that lead to better patient outcomes

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EPA 6: Longitudinal care

Theme	Longitudinal care		AT-EPA-06
Title	Manage and coordinate the longitudinal care of patients over the course of their condition, including transitions to survivorship and long-term follow-up		
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none"> • develop management plans and goals in consultation with patients • administer chronic and advanced conditions, complications, disabilities, and comorbidities, including advanced symptom care, palliative care • collaborate with other health care providers • demonstrate continuity of care • develop management plans and goals in consultation with patients including goals of transition in care. • facilitate patients self-management and self-monitoring • assess the timing and risks in transition from paediatric to adult care, and patients' readiness for transition to adult care • schedule appropriately and/or involve other specialists and allied health (e.g. GPs, radiology, pathology, surgeons, radiation oncologists, subspecialty oncologists, clinical haematologists) • communicate pertinent, contextually appropriate, and relevant patient information to appropriate health care providers and other stakeholders (e.g. GPs and local clinicians for rural patients) • summarise and document the clinical case for handover to other specialists, including adult oncologist/ haematologist/ survivorship team, and /or palliative care • collaborate with the broader health policy context • perform this activity in multiple settings appropriate to the specialty, including inpatient, ambulatory, and critical care settings. 		
Behaviours			
<p>Professional practice framework domain</p> <p>Medical expertise</p>	<p>Ready to perform without supervision</p> <p>Expected behaviours of a trainee who can routinely perform this activity without needing supervision</p>	<p>Requires some supervision</p> <p>Possible behaviours of a trainee who needs some supervision to perform this activity</p>	
	<p>The trainee will:</p> <ul style="list-style-type: none"> • monitor treatment outcomes, effectiveness, and adverse events • provide documentation on patients' presentation, management, and progress, including key points of diagnosis and decision making to inform coordination of care • ensure patients contribute to their needs assessments and care planning • assess adherence to treatment and monitoring plans • regularly assess and review care plans for patients with serious and chronic conditions, including pain, and disabilities based on short- and long-term clinical and quality of life goals 	<p>The trainee may:</p> <ul style="list-style-type: none"> • assess patients' knowledge, beliefs, concerns, and daily behaviours related to their chronic condition and/or disability and its management • recognise the importance of prevention and early detection in clinical practice • assess psychosocial issues that may affect health and/or access to services • identify the ways in which disease may impact on patients' lifestyles, such as contraception, pregnancies, employment, sport/leisure activities, and smoking 	

	<ul style="list-style-type: none"> • facilitate an optimal transition of care for patients, including adapting transition to meet individual patients' needs (e.g. if a patient has an intellectual disability) • identify and manage key risks for patients during transition • assess patients health literacy and developmental readiness for the demands of the adult care setting • outline the key components of a transitional care program and the differences between the cultures of paediatric and adult care services, including the role of the adult physician • evaluate environmental and lifestyle health risks, and advocate for healthy lifestyle choices • anticipate, prevent, and manage changes in health status at the time of transition • provide symptom care and palliative care support to patient and family with/without palliative care involvement
<p>Communication</p>	<ul style="list-style-type: none"> • establish plans for ongoing care that include monitoring health status and managing adherence • work with patients to increase opportunities to adopt healthy behaviours, such as good nutrition, good sleep hygiene, not smoking, no excess alcohol intake <hr/> <ul style="list-style-type: none"> • encourage patients' self-management through education to take greater responsibility for their care, and support problem solving • build robust relationships with patients that will be sustainable for both parties throughout the cancer journey • encourage patients' access to self-monitoring devices and assistive technologies • communicate with multidisciplinary team members, and involve patients in that dialogue • write relevant and detailed medical record entries, including clinical assessments and management plans • 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, about transition of care, and engage and support these parties in decision making

	<ul style="list-style-type: none"> explain the impact of oncological/haematological disease, acute or ongoing, on adolescent and young adults' leisure and work activities 	<ul style="list-style-type: none"> from parents to patients, and work with patients on planning this communicate sensitively with adolescents and young adults recognise when it is appropriate to communicate with patients individually versus when it is appropriate to communicate with patients and their family members and/or carers discuss with patients the differences between paediatric and adult care, such as the involvement of the parent or carer in decisions for adult patients versus paediatric patients
<p>Quality and safety</p>	<ul style="list-style-type: none"> use innovative models of chronic care using telehealth and digitally integrated support services review medicine use and ensure patients understand safe medication administration to prevent errors support patients' self-management by balancing between minimising risk and helping patients to become more independent participate in quality improvement processes impacting on patients' abilities to undertake normal activities of daily living identify patients at risk of a poor transition of care, and mitigate this risk use electronic tools (where available) to securely store and transfer patient information use consent processes, including written consent if required, for the release and exchange of information demonstrate understanding the medicolegal context of written communications ensure patients are informed of risks associated with any part of the proposed management plans 	<ul style="list-style-type: none"> participate in continuous quality improvement processes and clinical audits on chronic disease management identify activities that may improve patients' quality of life ensure that handover is complete, or work to mitigate risks if the handover was incomplete ensure all outstanding results or procedures are followed up by receiving units and clinicians keep patients' information secure, adhering to relevant legislation regarding personal information and privacy document patient history with clarity and completeness
<p>Teaching and learning</p>	<ul style="list-style-type: none"> contribute to the development of clinical pathways for cancer treatment and toxicities, and chronic diseases management based on current clinical guidelines educate patients to recognise and monitor their symptoms, and undertake strategies to assist their recovery 	<ul style="list-style-type: none"> use clinical practice guidelines for chronic diseases management take opportunities to teach junior colleagues during handover, as necessary explain how patient education can empower adolescents and young adults to take responsibility for their health

	<ul style="list-style-type: none"> integrate clinical education in handover sessions and other transition of care meetings tailor clinical education to the level of the professional parties involved educate adolescents and young adults about their conditions and their impacts on their lives (e.g. sexuality and contraception) provide appropriate written / online information and resources relevant to the transition stage 	
Research	<ul style="list-style-type: none"> search for and critically appraise evidence to resolve clinical areas of uncertainty 	<ul style="list-style-type: none"> search literature using problem/intervention/comparison/outcome format recognise appropriate use of review articles
Cultural safety	<ul style="list-style-type: none"> encourage patients from culturally and linguistically diverse backgrounds to join local networks to receive the support needed for long-term self-management communicate with careful consideration to health literacy, language barriers, and culture and religion about patient preferences, and whether they are realistic and possible, respecting patient choices recognise the timing, location, privacy, and appropriateness of sharing information with patients 	<ul style="list-style-type: none"> provide culturally safe chronic disease management include relevant information regarding patients' cultural, religious and/or ethnic background in handovers, and whether an interpreter is required
Ethics and professional behaviour	<ul style="list-style-type: none"> share information about patients' health care, consistent with privacy laws and confidentiality and professional guidelines use consent processes for the release and exchange of health information assess patients' decision-making capacity, and appropriately identify and use alternative decision makers disclose and share only contextually appropriate medical and personal information demonstrate understanding of the clinical, ethical, and legal rationale for information disclosure share information about patients' health 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, 	<ul style="list-style-type: none"> share information between relevant service providers acknowledge and respect the contribution of health professionals involved in patients' care maintain respect for patients and other health professionals, including respecting privacy and confidentiality

	<p>such as genetic information and blood-borne-virus status, and seek appropriate advice about disclosure of such information</p> <ul style="list-style-type: none"> • interacts in a collegiate and collaborative way with professional colleagues during transitions of care • explain the role of GPs in patients' care, including relevant guidelines and how they apply
<p>Judgement and decision making</p>	<ul style="list-style-type: none"> • implement stepped care pathways in the management of chronic diseases and disabilities • recognise patients' needs in terms of both internal resources and external support on a long-term health care journey • ensure patients' care is in the most appropriate facility, setting, or provider, including involving AYA services for adolescents and young adults. • identify the right time to start facilitating transition by considering the needs of individual patients • select the appropriate specialist to transition the patient to (e.g. general practitioner, specialist in paediatric or adult sector, survivorship care, palliative care) <ul style="list-style-type: none"> • recognise personal limitations and seek help in an appropriate way when required • use a structured approach to consider and prioritise patients' issues • recognise personal limitations and seek help in an appropriate way when required
<p>Leadership, management, and teamwork</p>	<ul style="list-style-type: none"> • coordinate whole-person care through involvement in all stages of the patients' care journey • use a multidisciplinary approach across services to manage patients with serious and chronic diseases and disabilities • develop collaborative relationships with patients and a range of health professionals • share the workload of transitions of care appropriately, including delegation • demonstrate understanding of the medical governance of patient care, and the differing roles of team members • show respect for the roles and expertise of other health professionals, and work effectively as a member of professional teams • ensure that multidisciplinary teams provide the opportunity for patients' engagement and participation when appropriate <ul style="list-style-type: none"> • participate in multidisciplinary care for patients with serious and chronic diseases and disabilities, including organisational and community care on a continuing basis, appropriate to patients' context • recognise factors that impact on the transfer of care, and help subsequent health professionals to understand the issues to continue care • work to overcome the potential barriers to continuity of care, appreciating the role of handover in overcoming these barriers • recognise the importance of the multidisciplinary team in the management of adolescents and young adults

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- recognise and work collaboratively with other health care providers, (e.g. allied health workers, psychologists and AYA services for AYA patients)
 - ensure sufficient handover, including robust notes to convey complex history and/or rationale for past decisions
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Health policy, systems, and advocacy

- use health screening for early intervention and chronic diseases management
 - assess alternative models of healthcare delivery to patients with chronic diseases and disabilities
 - participate in hospital/ government initiatives for serious and chronic diseases management to reduce hospital admissions and improve patients' quality of life, utilising hospital in the home programmes and shared care with providers closer to home
 - help patients access initiatives and services for patients with serious and chronic diseases and disabilities
 - contribute to processes for managing risks, and identify strategies for improvement in transition of care
 - engage in organisational processes to improve transitions of care, such as formal surveys or follow-up phone calls after hospital discharge
 - connect patients with local or online peer support groups
 - contribute to the development of a written transition policy, which is a document that sets out principles, standards, and practices of how transitions are managed at the centre
 - advocate for resources to support efficient and more effective transitions
- demonstrate awareness of government initiatives and volunteer and philanthropic services available for patients with serious and chronic diseases and disabilities, and display knowledge of how to access them
 - factor transport issues and costs to patients into arrangements for transferring patients to other settings
 - apply local and international guidelines around transitions
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EPA 7: Communication with patients

Theme	Communication with patients		AT-EPA-07
Title	Discuss diagnoses and management plans with patients		
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none"> select a suitable context and include family and/or carers and other team members devise a patient-centred perspective, including adjusting for age, developmental stage, cognition and disabilities select and use appropriate modalities and communication strategies structure conversations intentionally negotiate a mutually agreed management plan verify patient understanding of information conveyed develop and implement a plan for ensuring actions occur document the conversation . 		
Behaviours			
Professional practice framework domain	Ready to perform without supervision	Requires some supervision	
	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	
Medical expertise	The trainee will:	The trainee may:	
	<ul style="list-style-type: none"> inform patients of all aspects of their clinical management, including assessments and investigations provide information to patients to enable them to make informed decisions about diagnostic, therapeutic, and management options provide patients with adequate opportunity to question or refuse interventions and treatments seek to understand the concerns and goals of patients, and plan management in partnership with them anticipate and be able to correct any misunderstandings patients may have about their conditions and/or risk factors 	<ul style="list-style-type: none"> apply knowledge of the scientific basis of health and disease to the management of patients demonstrate an understanding of the clinical problem being discussed formulate management plans in partnership with patients attend family meetings 	
Communication	<ul style="list-style-type: none"> use an appropriate communication strategy and modalities for communication, including: <ul style="list-style-type: none"> emails face-to-face telehealth phone calls convey information considerately and sensitively to patients, seeking 	<ul style="list-style-type: none"> 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, 	

	<p>clarification if unsure of how best to proceed</p> <ul style="list-style-type: none"> • 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 plan in their own words, to verify understanding • treat children, adolescents and young people respectfully, and listen to their views • recognise the role of family and/or carers and, when appropriate, encourage patients to involve their family and/or carers in decisions about their care • inform patients/families of MDM/other professional meeting discussion outcomes 	<p>physical, cultural, socioeconomic, and situational factors</p> <ul style="list-style-type: none"> • collaborate with patient liaison officers • use interpreters
<p>Quality and safety</p>	<ul style="list-style-type: none"> • 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 patient complaints 	<ul style="list-style-type: none"> • inform patients of the material risks associated with the proposed management plan • treat information about patients as confidential
<p>Teaching and learning</p>	<ul style="list-style-type: none"> • 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 • encourage and support junior staff in their communication with families, while providing feedback. • encourage junior staff to participate in difficult or important family conversations, and provide an opportunity to debrief/reflect afterwards 	<ul style="list-style-type: none"> • respond appropriately to information sourced by patients, and to patients' knowledge regarding their condition

<p>Research</p>	<ul style="list-style-type: none"> • 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 involving patients in research 	<ul style="list-style-type: none"> • refer to evidence-based clinical guidelines • demonstrate an understanding of the limitations of the evidence and the challenges of applying research in daily practice
<p>Cultural safety</p>	<ul style="list-style-type: none"> • demonstrate effective and culturally competent communication with Māori and Aboriginal and Torres Strait Islander peoples • effectively communicate with members of other cultural groups by meeting patients' specific language, cultural, and communication needs • use qualified language interpreters or cultural interpreters to help meet patients' communication needs • provide plain language and culturally appropriate written materials to patients 	<ul style="list-style-type: none"> • identify when to use interpreters • allow enough time for communication across linguistic and cultural barriers
<p>Ethics and professional behaviour</p>	<ul style="list-style-type: none"> • encourage and support patients to be well informed about their health, and to use this information wisely when they make decisions • encourage and support patients and, when relevant, their families 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 • recognise own limitations and engage someone else in the team/with a senior colleague for specific discussions if needed 	<ul style="list-style-type: none"> • respect the preferences of patients • communicate appropriately, consistent with the context, and respect patients' needs and preferences • maximise patient autonomy, and support their decision making • 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
<p>Leadership, management, and teamwork</p>	<ul style="list-style-type: none"> • communicate effectively with team members involved in patients' care, and with patients • discuss medical assessments, treatment plans, and investigations with patients and primary care 	<ul style="list-style-type: none"> • answer questions from team members • summarise, clarify, and communicate responsibilities of healthcare team members • keep healthcare team members focused on patient outcomes

	<p>teams, working collaboratively with all</p> <ul style="list-style-type: none"> • discuss patient care needs with healthcare team members to align them with the appropriate resources • facilitate an environment where all team members feel they can contribute and their opinion is valued • communicate accurately and succinctly, and motivate others on the healthcare team
Health policy, systems, and advocacy	<ul style="list-style-type: none"> • collaborate with other services, such as community health centres and consumer organisations, to help patients navigate the healthcare system • communicate with and involve other health professionals

EPA 8: Prescribing

Theme	Prescribing		AT-EPA-08
Title	Prescribe therapies tailored to patients' needs and conditions		
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none"> • collect and interpret medication histories • choose appropriate medicines based on an understanding of pharmacology, taking into consideration age, comorbidities, potential drug interactions, risks, and benefits • prescribe as per treatment schedules of protocols, clinical trials • communicate with patients about the benefits and risks of proposed therapies • explain instructions on medication administration effects and side effects • monitor medicines for efficacy and safety, including with drug levels, toxicity screening, pharmacogenomics • review medicines and interactions, and cease where appropriate • collaborate with pharmacists. 		
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	
Medical expertise	The trainee will: <ul style="list-style-type: none"> • identify the patients' disorders requiring pharmacotherapy • consider non-pharmacologic therapies • consider age, chronic disease status, lifestyle factors, allergies, potential drug interactions, and patient preference prior to prescribing a new medication • plan for follow-up and monitoring • maintain up to date knowledge of medications and therapies, including their interactions with other therapeutic modalities • apply commonly used treatment protocols 	The trainee may: <ul style="list-style-type: none"> • be aware of potential side-effects and practical prescription points, such as medication compatibility and monitoring in response to therapies • select medicines for common conditions appropriately, safely, and accurately • demonstrate understanding of the rationale, risks, benefits, side effects, contraindications, dosage, and drug interactions • identify and manage adverse events • calculate body surface area for chemotherapy prescribing 	
Communication	<ul style="list-style-type: none"> • discuss and evaluate the risks, benefits, and rationale of treatment options, making decisions in partnership with patients • write clear and legible prescriptions in plain language, and include specific indications for the anticipated duration of therapy • educate patients about the intended use, expected outcomes, and potential side effects for each prescribed medication, addressing 	<ul style="list-style-type: none"> • discuss and explain the rationale for treatment options with patients • explain the benefits and burdens of therapies, considering patients' individual circumstances • write clearly legible scripts or charts using generic names of the required medication in full, including mg/kg/dose information and all legally required information 	

	<p>the common, rare, and serious effects at the time of prescribing to improve patients' adherence to pharmacotherapy</p> <ul style="list-style-type: none"> • describe how the medication should and should not be administered, including any important relationships to food, time of day, and other medicines being taken • ensure patients' understanding by repeating back pertinent information, such as when to return for monitoring and whether therapy continues after this single prescription • identify patients' concerns and expectations, and explain how medicines might affect their everyday lives 	<ul style="list-style-type: none"> • seek further advice from experienced clinicians or pharmacists as appropriate • provide written/online information when available
<p>Quality and safety</p>	<ul style="list-style-type: none"> • review medicines regularly to reduce non-adherence, and monitor treatment effectiveness, possible side effects, and drug interactions, ceasing unnecessary medicines • use electronic prescribing tools where available, and access electronic drug references to prevent errors caused by drug interactions and poor handwriting • prescribe new medicines only when they have been demonstrated to be safer or more effective at improving patient-oriented outcomes than existing medicines • participate in clinical audits to improve prescribing behaviour, including an approach to polypharmacy and prescribing cascade • report suspected adverse events to the Advisory Committee on Medicines, and record it in patients' medical records 	<ul style="list-style-type: none"> • check the dose before prescribing • monitor side effects of medicines prescribed • identify medication errors and institute appropriate measures • use electronic prescribing systems safely • rationalise medicines to avoid polypharmacy
<p>Teaching and learning</p>	<ul style="list-style-type: none"> • use continuously updated software for computers and electronic prescribing programs • ensure patients understand management plans, including adherence issues • use appropriate guidelines and evidence-based medicine resources to maintain a working knowledge of current medicines, keeping up to date on new medicines 	<ul style="list-style-type: none"> • undertake continuing professional development to maintain currency with prescribing guidelines • reflect on prescribing, and seek feedback from a supervisor

<p>Research</p>	<ul style="list-style-type: none"> critically appraise research material to ensure any new medicine improves patient-oriented outcomes more than older medicines, and not just more than placebo use sources of independent information about medicines that provide accurate summaries of the available evidence on new medicines enrol patients in treatment and supportive care clinical trials, understanding the rationale, medications involved 	<ul style="list-style-type: none"> make therapeutic decisions according to the best evidence recognise where evidence is limited, compromised, or subject to bias or conflict of interest consider available evidence, guidelines, and clinical trials
<p>Cultural safety</p>	<ul style="list-style-type: none"> explore patients' understanding of and preferences for non-pharmacological and pharmacological management offer patients effective choices based on their expectations of treatment, health beliefs, and cost interpret and explain information to patients at the appropriate level of their health literacy anticipate queries to help enhance the likelihood of medicines being taken as advised ensure appropriate information is available at all steps of the medicine management pathway 	<ul style="list-style-type: none"> appreciate patients' cultural and religious backgrounds, attitudes, and beliefs, and how these might influence the acceptability of pharmacological and non-pharmacological management approaches
<p>Ethics and professional behaviour</p>	<ul style="list-style-type: none"> provide information to patients about: <ul style="list-style-type: none"> » what the medicine is for » what it does » potential side effects » how to take it » when it should be stopped make prescribing decisions based on good safety data when the benefits outweigh the risks involved demonstrate understanding of the ethical implications of pharmaceutical industry-funded research and marketing 	<ul style="list-style-type: none"> consider the efficacy of medicines in treating illnesses, including the relative merits of different non-pharmacological and pharmacological approaches follow regulatory and legal requirements and limitations regarding prescribing follow organisational policies regarding pharmaceutical representative visits and drug marketing explain the use of orphan medications in children
<p>Judgement and decision making</p>	<ul style="list-style-type: none"> use a systematic approach to select treatment options use medicines safely and effectively to get the best possible results choose suitable medicines only if medicines are considered necessary and will benefit patients prescribe medicines appropriately to patients' clinical needs, in 	<ul style="list-style-type: none"> recognise personal limitations and seek help in an appropriate way consider the following factors for all medicines: <ul style="list-style-type: none"> » contraindications » cost to patients, families, and the community » funding and regulatory considerations

	<p>doses that meet their individual requirements, for a sufficient length of time, with the lowest cost to them</p> <ul style="list-style-type: none"> • evaluate new medicines in relation to their possible efficacy and safety profile for individual patients 	<ul style="list-style-type: none"> » generic versus brand medicines » interactions » risk-benefit analysis
<p>Leadership, management, and teamwork</p>	<ul style="list-style-type: none"> • interact with medical, pharmacy, and nursing staff to ensure safe and effective medicine use 	<ul style="list-style-type: none"> • work collaboratively with pharmacists • participate in medication safety and morbidity and mortality meetings
<p>Health policy, systems, and advocacy</p>	<ul style="list-style-type: none"> • choose medicines in relation to comparative efficacy, safety, and cost-effectiveness against medicines already on the market • prescribe for individual patients, considering history, current medicines, allergies, and preferences, ensuring that healthcare resources are used wisely for the benefit of patients 	<ul style="list-style-type: none"> • prescribe in accordance with the organisational policy

EPA 9: Investigations and procedures

Theme	Investigations and procedures		AT-EPA-9
Title	Select, organise, and interpret investigations, and plan, prepare for, perform, and provide aftercare for important practical procedures		
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none"> select, plan, and use evidence-based clinically appropriate investigations and procedures prioritise patients receiving investigations and procedures evaluate the anticipated value of the investigation/ procedure produce informed consent collaborate with patients to facilitate choices that are right for them organise set up of equipment, maintaining an aseptic field communicate aftercare protocols and instructions to patients and medical and nursing staff perform procedures/ investigations, under appropriate sedation or anaesthetic resolve unexpected events and complications during and after procedures arrange aftercare for patients interpret results and outcomes of investigations/ procedures, including imaging and reports communicate the outcome of procedures and investigations to patients perform this activity across relevant settings, including outpatients, theatre and day clinic. 		
Behaviours			
<p>Professional practice framework Domain</p> <p>Medical expertise</p>	<p>Ready to perform without supervision</p> <p>Expected behaviours of a trainee who can routinely perform this activity without needing supervision</p> <p>The trainee will:</p> <ul style="list-style-type: none"> choose evidence-based investigations/ procedures and frame them as an adjunct to comprehensive clinical assessments know local and international guidelines for the investigation/ procedure assess patients' concerns, and determine the need for specific tests that are likely to result in overall benefit develop plans for investigations/ procedures, identifying their roles and timing recognise and correctly interpret abnormal findings, considering patients' specific circumstances, and act accordingly 	<p>Requires some supervision</p> <p>Possible behaviours of a trainee who needs some supervision to perform this activity</p> <p>The trainee may:</p> <ul style="list-style-type: none"> provide rationale for investigations/ procedures understand the significance of abnormal test results and act on these consider patient factors and comorbidities consider age-specific reference ranges assess patients and identify indications for procedures/ investigations perform a range of common procedures check for allergies and adverse reactions consider risks and complications of procedures 	

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- select procedures by assessing patient-specific factors, risks, benefits, and alternatives
 - confidently and consistently perform a range of common procedures
 - ensure team members are aware of all identified allergies/adverse reactions, and take precautions to avoid allergies/adverse reactions during procedures
 - ensure patients have complied with pre-procedure preparations
 - recognise and effectively manage complications arising during or after procedures
 - recognise and correctly interpret normal and abnormal findings of investigations/ procedures
 - demonstrate knowledge of how stem cell collection, stem cell transplants are performed
- interpret results of common diagnostic procedures/investigations
 - organise and document post procedure review of patients
-

Communication

- explain procedures to patients clearly and sensitively including reasons for procedures/investigations, potential alternatives, and possible risks, to facilitate informed choices and obtain consent
 - use clear and simple language, and check that patients understand the terms used and agree to proceed with proposed investigations/procedures
 - identify patients' concerns and expectations, providing adequate explanations on the rationale for individual test ordering
 - confirm whether patients have understood the information they have been given and the need for more information before deciding
 - address patients concerns relating to procedures, providing opportunities to ask questions
 - tailor language according to patients' age and capacity to understand
 - use written or visual material or other aids that are accurate and up to date to support discussions with patients
 - explain findings or outcomes of investigations/procedures to patients in a considerate way
- discuss the indications, risks, benefits, and complications of investigations with patients before ordering investigations
 - arrange investigations, providing accurate and informative referrals, and liaise with other services where appropriate
 - explain the process of procedures to patients without providing broader context
 - help patients to choose aspects of the procedures that can be modified, such as timing
 - communicate with members of procedural teams so all team members understand who each member is
 - discuss postprocedural care with patients
 - complete relevant patients' documentation, and conduct an appropriate clinical handover
 - explain the results of investigations to patients
-

- document procedures accurately and in detail in clinical notes:
 - informed consent
 - procedures requested and performed
 - reasons for procedures
 - medicines given
 - aseptic technique
 - aftercare
- communicate effectively with all persons involved prior to, during and after procedures:
 - team members
 - patients
- identify appropriate proxy decision makers when required

Quality and safety

- identify adverse outcomes that may result from a proposed investigation/procedure, focusing on patients' individual situations
 - obtain informed consent or other valid authority before undertaking any procedure/ investigation
 - set up all necessary equipment, and consistently use universal precautions and aseptic technique
 - confirm patients' identification and verify the procedure/investigation and where appropriate, the correct site/side/level for the procedure
 - ensure that information on patients' consent forms match procedures/ investigations to be performed
 - identify, document, and appropriately notify of any adverse event or equipment malfunction
 - demonstrate principles of physician safety:
 - chemotherapy
 - radiation safety
 - discuss serious incidents at appropriate clinical review meetings
- consider safety aspects of investigations/procedures when planning them
 - seek help with interpretation of test results for less common tests or indications or unexpected results
 - provide information in a manner so that patients are fully informed when consenting to any procedure
 - demonstrate a consistent application of aseptic technique
 - identify patients using approved patients' identifiers before any treatment or intervention is initiated
 - perform investigations/procedures in a safe environment

Teaching and learning

- use appropriate guidelines, evidence sources, and decision support tools
 - participate in clinical audits to improve test ordering strategies for diagnoses and screening
 - refer to and/or be familiar with relevant published procedural
- participate in continued professional development
 - help junior colleagues to develop new skills
 - actively seek feedback on personal technique until competent

	<ul style="list-style-type: none"> guidelines prior to undertaking procedures organise or participate in in-service training on new technology provide specific and constructive feedback and comments to junior colleagues initiate and conduct skills training for junior staff 	
Research	<ul style="list-style-type: none"> provide patients with relevant information if a proposed investigation is part of a research program obtain written consent from patients if the investigation is part of a research program be aware of relevant open clinical trials and offer them to the patient obtain consent for biobank samples and other biological samples as required by clinical trials 	<ul style="list-style-type: none"> refer to evidence-based clinical guidelines consult current research on investigations consider samples required for biobanking or clinical trials
Cultural safety	<ul style="list-style-type: none"> understand patients' views and preferences about any proposed investigation/procedure and the adverse outcomes they are most concerned about consider individual patients' cultural perceptions of health and illness, and adapt practice accordingly 	<ul style="list-style-type: none"> respect religious, cultural, linguistic, and family values and differences
Ethics and professional behaviour	<ul style="list-style-type: none"> remain within the scope of the authority given by patients, with the exception of emergencies discuss with patients how decisions will be made once the investigation/procedure has started and the patient is not able to participate in decision making respect patients' decisions to refuse investigations/procedures, even if their decisions may not be appropriate or evidence based advise patients there may be additional costs, which patients may wish to clarify before proceeding explain the expected benefits as well as the potential burdens and risks of any proposed investigation/procedure before obtaining informed consent or other valid authority 	<ul style="list-style-type: none"> identify appropriate proxy decision makers choose not to investigate in situations where it is not appropriate for ethical reasons practise within current ethical and professional frameworks practise within own limits, and seek help when needed involve patients in decision making regarding investigations, obtaining the appropriate informed consent, including financial consent, if necessary perform procedures when adequately supervised follow procedures to ensure safe practice

- demonstrate awareness of complex issues related to genetic information obtained from investigations, and subsequent disclosure of such information
- understand institution/department protocols and ethical practices and guidelines around performing procedures
- if required to perform procedures, do so in accordance with institution/department protocols and ethical practices and guidelines
- show respect for knowledge and expertise of colleagues
- maximise patient autonomy in decision making

Judgement and decision making

- evaluate the costs, benefits, and potential risks of each investigation/procedure in a clinical situation
- adjust the investigative path depending on test results received and in response to risks to individual patients
- consider whether patients' conditions may get worse or better if no tests are selected
- identify roles and optimal timings 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
- select appropriate investigations on the samples obtained in diagnostic procedures
- choose the most appropriate investigation for the clinical scenario in discussion with patients
- recognise personal limitations and seek help in an appropriate way when required
- prioritise which patients receive procedures first, if there is a waiting list
- use tools and guidelines to support decision making
- recognise optimal procedures for patients
- consider whether a paediatric, AYA or adult setting may be more appropriate to conduct procedures and/or investigations

Leadership, management, and teamwork

- consider the role other members of the healthcare team might play, and what other sources of information and support are available
- ensure team members are confident and competent in their assigned roles
- coordinate efforts, encourage others, and accept responsibility for work done
- demonstrate understanding of what parts of an investigation are provided by different doctors or health professionals
- ensure all relevant team members are aware that a procedure is occurring
- discuss patients' management plans for recovery with colleagues

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- ensure results are checked in a timely manner, taking responsibility for following up results
 - provide staff with clear aftercare instructions, and explain how to recognise possible complications
-

Health policy, systems, and advocacy

- select and justify investigations regarding the pathological basis of disease, appropriateness, utility, safety, and cost effectiveness
 - initiate local improvement strategies in response to serious incidents
 - use resources efficiently when performing procedures/ordering investigations
 - know relevant local and international guidelines for the investigation/ procedure
- perform investigations/procedures in accordance with organisational guidelines and policies
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EPA 10: Critical appraisal of evidence

Theme	Critical appraisal of evidence	AT-EPA-10
Title	Critical appraisal of evidence to provide the best cancer care, ensuring patient safety, wise allocation of resources, and advancement of research through evidence-based practice	

Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none"> examine research evidence to judge its value and relevance in a clinical context prepare informed decisions about cancer treatments regarding efficacy and toxicities of treatment using the best available evidence identify biases, limitations in research findings to prevent adoption of ineffective, clinically insignificant or potentially harmful treatments prioritise interventions with proven efficacy, to optimise resource allocations and reducing healthcare costs facilitate shared decision-making between patients and clinicians using the best available evidence identify gaps in existing knowledge to improve future research and oncology studies demonstrate institutional policy and guidelines are evidence-based and up-to-date.
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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
Medical expertise	<p>The trainee will:</p> <ul style="list-style-type: none"> demonstrate proficiency in the evidence-based medicine utilises research critically to provide considered expert opinions in all aspects of clinical care, including at multidisciplinary team meetings able to have evidence-based discussions with colleagues within and out of the specialty where a difference in opinion is observed 	<p>The trainee may:</p> <ul style="list-style-type: none"> discuss key findings from landmark trials related to cancer management keep up-to-date with the publication and presentation of practice-changing evidence with reference to clinical cases
Communication	<ul style="list-style-type: none"> facilitate shared-decision making with patients and their families on treatment options based on the best evidence with the ability to have in-depth discussion of the available evidence if required/appropriate communicate evidence in a way that is understandable for the patients communicate effectively with multidisciplinary members (allied health, scientists, statisticians) regarding best practice updates 	<ul style="list-style-type: none"> able to refer to the available evidence when making shared decisions with the patients and their families

Quality and safety	<ul style="list-style-type: none"> document the rationale behind decisions, including factors considered, evidence and research findings and patient's input as reference for future care 	<ul style="list-style-type: none"> aware of updated consensus treatment guidelines and standards of care, with an ability to compare research findings with established best practices
Teaching and learning	<ul style="list-style-type: none"> contribute to teaching sessions to ensure critical appraisal skills are transferred successfully to the other members of the healthcare team 	<ul style="list-style-type: none"> proactively seeks to improve own ability for critical appraisal
Research	<ul style="list-style-type: none"> demonstrate proficiency in the principles of evidence based medicine (hierarchy of evidence, systematic reviews and critical appraisal tools) to evaluate research quality identify gaps and evidence that will lead to future research prepare reviews of literature on patients' encounters to present at journal club meetings 	<ul style="list-style-type: none"> demonstrate an understanding of research methodology (study design, statistical analysis, data interpretation) to identify biases, flaws and limitations in research studies
Cultural safety	<ul style="list-style-type: none"> communicate with careful consideration to health literacy, language barriers, and culture, respecting patient choices considers gaps in evidence surrounding cultural groups and considers ways to improve equity in clinical trial opportunities 	<ul style="list-style-type: none"> recognise the timing, location, privacy and appropriateness of sharing information with patient recognises the barriers to inclusion in clinical trials and the limitations of evidence due to underrepresentation of cultural groups
Ethics and professional behaviour	<ul style="list-style-type: none"> reflect on ethical implications of applying the evidence or research findings, especially in cases where evidence may be limited, experimental or controversial continue self-learning and sharing updates on critical appraisal techniques, new evidence and best practices to ensure that they stay current in their knowledge 	<ul style="list-style-type: none"> understand the ethical aspects of oncology research such as patient consent, research ethic boards and conflicts of interest to ensure research integrity
Judgement and decision making	<ul style="list-style-type: none"> determine the applicability of research findings to a patient cohort considering factors such as age, comorbidities and patient treatment preferences consider the potential benefits and risks of implementing a treatment based on research findings or evidence in clinical practice, considering the impact on patient outcome, quality of life and potential adverse effects 	<ul style="list-style-type: none"> assess the quality of research including study design, methodology, data analysis to determine reliability and validity of presented evidence
Leadership, management, and teamwork	<ul style="list-style-type: none"> communicate with multidisciplinary members effectively to facilitate exchange of ideas and perspectives on new evidence 	<ul style="list-style-type: none"> promote best practice treatment based on evidence-based findings

	<ul style="list-style-type: none"> • identify areas of improvement and implementing evidence-based changes in their practice/institution
Health policy, systems, and advocacy	<ul style="list-style-type: none"> • provide recommendations for local and institutional guidelines based on best available evidence • make effective decisions on resource allocation for treatment options with best efficacy, considering adverse effects and impact on quality of life • advocate for improved access to new diagnostics, treatments and research funding • promote shared decision-making and patient-centred care based on best clinical evidence

DRAFT

Knowledge guides

Knowledge guides 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	<u>Scientific foundations of paediatric oncology</u>
2	<u>Acute and emergency paediatric oncology care</u>
3	<u>Oncological conditions</u>
4	<u>Non-malignant haematological conditions</u>
5	<u>Anticancer therapies and supportive care/ Principles of management</u>

**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.

Cancer epidemiology and incidence

- Aetiology of childhood and adolescence cancer, including facts and theories
- Epidemiology and outcomes of childhood cancers, including ethnic and geographical variability
- High cure rate
- Incidence and mortality rates
- Leading cause of disease, related mortality in children
- Rarity of childhood cancers and difference to adult cancers, including importance of early detection rather than screening methods

Cell biology

- Biology of normal cells
- Process of cell division and apoptosis
- Properties of cancer cells vs. normal cells
- Role of intracellular signalling, signal transduction, transcription and growth factors
- Basic processes of carcinogenesis and tumour growth
- Angiogenesis
- Gene structure, organisation, expression, and regulation,
 - » molecular mechanisms of mutagenesis
 - » role of DNA and protein synthesis, breakage and repair
 - » role of tumour suppressor genes and oncogenes and how these relate to inherited cancer and cytogenetics
- Mechanisms of tumour cell invasion
- Metastasis
- Cell cycle, its control by oncogenesis, and interaction with therapy
- Genetics
 - » implications of an inherited predisposition to cancer or haematological conditions
 - » syndromic and germline genetic basis of malignant disease
 - downs syndrome
 - li-fraumeni
 - neurofibromatosis
 - overgrowth syndromes
- Mechanisms of cell adhesion and contact inhibition
- Molecular basis of malignant disease, implications for diagnosis and treatment targeted therapy
- Role of infections predisposing to cancer
- Somatic genetics in cancer
- Tumour cell kinetics, proliferation and programmed cell death, and the balance between cell death and cell proliferation
 - » normal and abnormal mechanisms of cellular growth control

Tumour immunology

- Cellular and humoral components of the immune system
- Immune-mediated antitumour cytotoxicity
- Inter-relationship between tumour, micro-environments and host immune systems
 - » antigenicity
 - » immune-mediated antitumour cytotoxicity
 - » direct action of cytokines on tumours
- Regulatory action of cytokines on the immune system

Basics of anatomy

- Anatomical markers for invasive procedures
- General knowledge of whole body, site varies by type of cancer and potential for metastases

Basics of pharmacology

- Nutrition and fluid management
 - » fluid and caloric requirements by age and weight
 - » alternative types of feed and techniques
 - gastrostomy tubes
 - nasogastric
 - parenteral nutrition
- Fluid requirements for treatment of various presentations and chemotherapies
- Pharmacology
 - » pharmacological basis for treatments
 - » dosing (i.e., size, age, weight, body surface area)
 - » pharmacogenomics
 - » specific chemotherapy protocols including types of chemotherapy agents, formulations and routes
 - » combinations, interactions and contra-indications
 - » monitoring of drug levels, compliance
 - » screening for adverse effects
 - » pharmacokinetics and pharmacodynamics of commonly prescribed medications
 - » common supportive care medications
 - analgesics
 - antibiotics
 - antiemetics
 - laxatives
 - » biologic and emerging novel therapies including immune therapy, targeted therapies for cancer
 - » issues surrounding cancer drug approval, prescribing, and availability
 - » local policies for intrathecal cytotoxic therapy
 - » relevant regulatory requirements (e.g., opioid prescribing)

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- » role of the regulatory agents involved in drug use, monitoring and licencing
 - Committee on Safety of Medicines
 - hospital drug committees
 - National Institute for Health and Care (NICE)
 - Therapeutics Goods Administration (TGA)
 - » protective agents against toxicity (e.g., dexrazone with anthracyclines)
 - » differences between countries with respect to new drug development and approval mechanisms, equity and availability of clinical trials
 - » compassionate use agents
 - » drug approval and marketing processes in Australia/Aotearoa New Zealand, including off label use of chemotherapy medications for paediatric patients

Principles of cancer prevention, early detection

- Early detection principles and methods
- Application of cancer screening
- Role of genetics and cancer predisposition syndromes, and applicable screening surveillance
- Staging of paediatric cancers
- Staging of adult cancers
- Secondary malignancies
- Long term follow up of childhood cancer survivors to detect potential second malignancies earlier
- Promotion of healthy lifestyle in transition to adulthood
- Education to primary health care and the general population about early recognition of potential cancer diagnoses
- Immunisations and prevention
 - » COVID-19 vaccine
 - » Fluvax
 - » HPV (human papillomavirus) vaccine
 - » post treatment booster immunisations

Principles of cancer treatment in paediatric oncology

Includes managing babies, children, adolescents from diagnosis to long term follow up or palliative care, over many years

- Access appropriate supportive care from other specialities and allied health
- Account taken of patient, age, current situation and pre-existing situation, and family and cultural and environmental circumstances
- Advanced supportive medical care during treatment
 - » blood product transfusions
 - » infection
 - » management and treatment of toxicities
 - » pain management
 - » prophylactic antibiotics
- Appropriate local control
 - » other techniques
 - » radiation

-
- » surgery
 - Appropriate referral and involvement of other teams
 - » allied health
 - » other specialities
 - » psychosocial
 - Appropriate systemic therapy
 - » cellular therapy
 - » chemotherapy
 - » immunotherapy
 - » targeted agents
 - Common presentations of cancer per age group and presenting symptoms
 - Curative intent through best practice
 - Diagnostic techniques and appropriate staging for each disease
 - Enrolment onto clinical trial if possible
 - Least toxic treatments for cure
 - Monitoring and recording toxicity of treatment
 - Monitoring effects of treatment through
 - » emerging techniques such as detecting circulating tumour cells
 - » imaging
 - » minimal disease monitoring
 - » tumour markers
 - Monitoring for recurrence, and late effects of cancer and the treatment
 - Multidisciplinary team involvement and presentation of all new diagnoses
 - Principles of 'breaking bad news' especially around diagnosis and treatment initiation with families
 - Principles of palliative care and early referral for high risk patients
 - Transitioning patient appropriately to survivorship, adult care

Effects of cancer on growth and development

- Cancer effects on young people and their families on functioning, education and development
 - Coping mechanisms of patients and families within the context of cancer diagnosis
 - Developmental assessments during and after treatment
 - Education, vocational, employment and financial impact of cancer diagnosis and treatment
 - Effects of cancer, recurrence and, chronic illness on growth, psychosocial, emotional, physical and sexual development
 - Impact of diagnosis and treatment, including on later development such as brain radiation to learning
 - Impact on fertility, role and evidence and timing for fertility preservation
 - Impact on siblings of children with cancer
 - Importance of advocacy for patients and families
 - Physiological changes in growth and development as they relate to cancer and non-malignant haematological disorders, including normal laboratory values and the maturation of organs and tissues
 - Psychosocial impact of cancer and possible interventions
-

Late effects of treatment

- Potential long-term complications of cancer, surgery, radiation, chemotherapy and other systemic treatments in childhood
- Risk factors for potential second malignancies
- Mental health and neuropsychological effects
- Genetic counselling

Principles and conduct of oncology clinical trials and research

- Appropriate diagnoses, including subtypes, staging and risk assignment to guide treatment
- Biomarker development
- Case reports
- Community/policy prevention measures
- Concept of study types, and ability to explain to patients and parents
- Considerations/difficulties around informed consent/assent, (e.g., gaining consent for a randomised clinical treatment trial with a family who have recently been given a potentially life threatening diagnosis)
- Ethical principles guiding research
- Evolution of current clinical trials and treatment outcomes
- 'Good clinical practice' in line with international directives for all aspects of the conduct of clinical trials
- Issues around collaborative working, both nationally and internationally, in the development of clinical trials for childhood malignancy, including knowledge of large study groups such as Children's Oncology Group and International Society for Paediatric Oncology
- Levels of evidence and classes of recommendations
- National clinical guidelines and how they guide practice
- Population risk determination of disease:
 - Randomised control trials
 - Registry analyses
 - Role of clinical trials
- Structure, aims, and functions of the Australian and New Zealand Children's Haematology and Oncology Group
- Systematic reviews and meta-analysis

Policy and provision of cancer care

- Advocacy for patients
- Contribution to implementation of national and local health policies and to health service targets and development of service
- Duty of professionals working with children with respect to safety and child protection concerns
- Government policies on cancer notification
- Government programs and policies which affect the health of cancer patients
- Legal and ethical guidelines relating to privacy, confidentiality, informed consent for treatment, and the right to refuse treatment
- Legal and practical issues related to Voluntary Assisted Dying Legislation, postmortems, coroner referrals

- Legal issues relating to anticancer treatment, relating to institution, and initiation and withdrawal of acute care
- Local and major international agencies/organisations with a role in cancer control, research, and/or treatment
- Role of government and legal aspects in the provision of health care

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.

General

- Techniques, benefits, and potential complications of investigations/ procedures
- Local and international guidelines for investigations / procedures
- Informed consent process
- Interpretation of results (i.e., Normal vs. abnormal)
- Quality of life and patient reported symptom measures
- Safety guidelines for patients, families and staff in relation to investigation of body fluids, and radiation

Basic pathology

- Genetic and molecular testing
- Samples required
- Biopsies
 - » histopathology
 - » fresh
 - » frozen
 - » paraffin
- molecular techniques
 - » chromosomal analyses
 - » next-generation sequencing
 - » polymerase chain reaction
- precision medicine programmes
- cytology samples
 - » cytospin
 - » fluorescence in situ hybridization
- immunohistochemistry
- image guided, open or under local anaesthetic
- role for fine needle vs. trucut vs. excisional biopsies
- role for second opinions, central review
- role of morphology, immunohistochemistry, cytogenetic, molecular testing
- the importance of biobanking
- Blood tests (e.g., tumour markers, prognostic markers)
- Urine tests (e.g., urinary catecholamines)
- Prognostic value
- Electron microscopy
- Light microscopy
- Tumour markers, including expected decline of markers
- Secretory and non-secretory tumours
- Alpha-fetoprotein (AFP)
- Beta HCG (BHCG)

Imaging

- Anatomical
 - CT
 - MRI

-
- plain imaging
 - ultrasounds
 - Functional imaging
 - PET scans
 - Image guided procedures
-

Procedures

- Access and collection of blood from central lines
- Bone marrow aspiration and trephines
- Bone marrow harvests
- Capillary blood sampling
- Electrocardiogram
- Lumbar puncture and intrathecal chemotherapy administration
- Nasogastric tube insertion
- Non-invasive blood pressure measurement
- Pleural aspiration
- Skin biopsies
- Urinary collection and routine testing
- Venesection
- Sedation, analgesia, anaesthetic as per local and international guidelines

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.

General management considerations

- Unique and critical needs of children and young people with cancer
- Advanced care, including referral to palliative care for patients with advanced stage disease, recurrent/ relapsed disease and known poorer outcomes
- Compliance with treatments
- Complicating conditions pre-morbid or related to treatment such as vision, hearing, cognitive impairment, fatigue, mood changes, neurological impairments
- Consider patient demographics, including geographic location, socioeconomic status, ethnicity, and cultural background when managing and following up these patients (e.g. travel from rural to metropolitan areas)
- Consideration of stresses related to social and peer interactions related to cancer and treatment, such as hair loss, amputation, weight changes
- Educational and vocational considerations (e.g., supporting continued education through treatment, and assisting with facilitating special requirements)
- Fertility preservation considerations
- Genetic testing and implications
- Goals of therapy
- Impact of comorbidities on diagnosis and management
- Individual patient clinical indications to determine patients' needs and the most appropriate approach to investigations and care
- Late effects of cancer and therapies, the importance of long term follow up
- Monitoring and managing side effects during treatment
- Multidisciplinary care in the management and treatment
- Shared care with local practitioners for patients not living close to main treatment centres
- Supportive care during cancer diagnosis and treatment, medical as well as psychosocial
- Tailor communication, environment according to patients', developmental stage, and psychosocial circumstances
- The timing of decisions and risks for the individual patient

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Abdominal distension or pain
- Abnormal blood results, such as electrolytes, impaired renal or liver function tests or pancytopenia, high blood counts
- Acutely unwell
- Allergy symptoms, anaphylaxis
- Altered bowel habit
- Anorexia, malnutrition
- Breathlessness, dyspnoea, cough
- Distended veins/ venous congestion of face, upper body suggestive of SVC obstruction
- Enlarging lymphadenopathy
- Fever
- Haematuria
- Headache
- Hepatosplenomegaly
- Hypertension
- Impaired conscious state
- Lymphadenopathy
- Masses- soft tissue, bony, abdominal
- Mouth ulceration
- Nausea, vomiting
- Neurological issues, including acute neurological deterioration, seizures
- Ocular issues including proptosis, white spot
- Pain
- Parental concern
- Skin rashes-petechiae, malignancy association
- Weakness, fatigue

Conditions

- Acute therapy toxicities:
- Constipation
- Mucositis
- Anaphylaxis
- Anterior mediastinal mass/ airway compression from upper airway mass
- Bleeding due to thrombocytopenia, DIC
- Cardiac tamponade
- Febrile neutropenia
- Hyperleucocytosis

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 patients 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

- Infection- Sepsis, bacterial, fungal, PJP and viral
- Immune related complications of cellular/immunotherapy and grading of them
 - » cytokine release syndrome
 - » immune effector cell-associated neurotoxicity syndrome (ICANS)
- New oncological/haematological diagnosis
- Pain due to
 - » inadequate analgesia
 - » malignancy
 - » treatment
- Raised intracranial pressure from intracranial lesion or drug side effect
- Specific chemotherapy toxicity
 - » cardiotoxicity
 - » haemorrhagic cystitis
 - » methotrexate toxicity
 - » posterior reversible encephalopathy syndrome (PRES)
- Spinal cord compression
- Superior vena cava syndrome
- Tumour lysis syndrome

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

- Bleeding or coagulation issues
- Endocrine abnormalities:
 - » cushing's syndrome
 - » growth issues
 - » sexual differentiation abnormalities
- Horner's syndrome
- Hypercalcaemia
- Opsoclonus myoclonus

Conditions

- Acute promyelocytic leukaemia
- Disseminated intravascular coagulation
- Opsoclonus myoclonus in association with Neuroblastoma
- Paraneoplastic syndrome
- Upper airway mass like neuroblastoma causing Horner's syndrome

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

Advanced Trainees will have a comprehensive

- Compression potential from rapidly growing masses on:
 - » airways
 - » bowel e.g. burkitt's lymphoma
 - » other areas of nervous system
 - » spinal cord
 - » vascular system

depth of knowledge of the principles of the foundational sciences.

- Delayed presentation/ diagnosis not uncommon due to non-specific symptoms
 - Impaired immunity, high risk of serious bacterial, viral, fungal infection
-

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.

Urgent management may be required including intensive care

Full examination and history, including weight

Investigations

- As indicated by presentation, and suspected diagnosis
- Blood cultures (as per local guidelines)
- Broad-spectrum intravenous antibiotics within an hour
- Consider new diagnosis of malignancy
- Febrile
- Full Blood Examination (FBE)
- Imaging - CXR, CT scan and others as clinically indicated
- Immediate IV access, central line access with aim of
- Inflammatory markers as appropriate

Procedures

- Cardiorespiratory resuscitation
 - » anaphylaxis
 - » sepsis
- Central line/ IV access
- Indwelling urinary catheter
- Insertion of intraosseous needle
- Intradermal, subcutaneous, intramuscular, intravenous injections
- Needle thoracocentesis for pleural effusion
- NG insertion
- Sedation/GA

Assessment

- Grading of toxicities e.g. by Common Terminology Criteria for Adverse Events (CTCAE)
- Mucositis score
- Pain score
- Patient reported outcome measures
- Quality of life score

Management as required and as per local/ international guidelines

- Hyperleucocytosis – Fluid, Hydroxyurea, Leucopheresis
- Management of anaphylaxis
- Management of fluid issues, including overload, ascites, pleural/ pericardial effusions

- Mediastinal mass- limited intervention to prevent cardiorespiratory collapse. May need pre-emptive steroids, awake sedation investigations in an ICU setting
- Pain management
- Tumour lysis- fluids, allopurinol/ rasburicase

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.

Specific management considerations

- Emergencies require prompt assessment and management, including escalation of care as required
- Be aware of goals of care

General management considerations

- Adolescent and young adults unique requirements (e.g. appropriate language and setting)
- Consider patient demographics, including geographic location, socioeconomic status, ethnicity, and cultural background when managing and following up these patients e.g. travel from rural to metropolitan areas
- Goals of therapy
- Impact of comorbidities on diagnosis and management
- Individual patient clinical indications to determine patients' needs and the most appropriate approach to investigations and care
- Multidisciplinary care in the management and treatment
- Tailor communication according to patients' age, developmental stage, and psychosocial circumstances

The timing of decisions and risks for the individual patient:

- Advanced care, including referral to palliative care for patients with advanced stage disease, recurrent/relapsed disease and known poorer outcomes
- Compliance with treatments
- Complicating conditions pre-morbid or related to treatment such as vision, hearing, cognitive impairment, fatigue, mood changes, neurological impairments.
- Consideration of stresses related to social and peer interactions related to cancer and treatment, such as hair loss, amputation, weight changes
- Educational and vocational considerations (e.g. supporting continued education through treatment, and assisting with special requirements if available)
- Fertility preservation considerations
- Genetic testing and implications
- Late effects of cancer and therapies, the importance of long term follow up
- Monitoring and managing side effects during treatment
- Shared care with local practitioners for patients not living close to main treatment centres
- Supportive care during cancer diagnosis and treatment, medical as well as psychosocial

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Abdominal mass
- Abnormal movement issues e.g. limp
- Asymptomatic finding on surveillance investigations
- Bowel/ bladder dysfunction
- Fever
- Lymphadenopathy
- Other masses e.g. pain or suspected malignancy
- Pain, including
 - » bone
 - » joint
- Pancytopenia
- Raised intracranial pressure
- Significant family history
- Skin lesions, including petechiae, atypical rashes
- Spinal cord compression
- Systemic symptoms
 - » anorexia
 - » fever
 - » weight loss
- Thoracic Mass, including mediastinal

Conditions

- Astrocytoma and Glioma - high and low grade
- Choroid plexus carcinoma
- Craniopharyngioma
- Hepatoblastoma
- Hepatocellular carcinoma
- Histiocytic disorders e.g. Langerhans cell histiocytosis
- Leukaemia
 - » acute myeloid leukemia and subtypes
 - » juvenile myelomonocytic leukaemia
- Lymphomas
 - » hodgkin
 - » non-Hodgkin
- Medulloblastoma
- Primitive neuroectodermal
- Retinoblastoma

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

Synthesis

- » 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 patients⁵ 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

- Sarcoma
 - » ewing
 - » osteo
 - » rhabdomyo
 - » soft tissue
- Stem cell transplants
 - » allogeneic
 - » autologous
- Teratoma
- Tumours, including
 - » bone and soft tissue
 - » central nervous system and spinal cord
 - » differentiated ovarian/ testicular
 - » endocrine tumours
 - adrenocortical
 - phaeochromocytoma
 - » thyroid cancers
 - » germ cell
 - » hepatic
 - » less common bone
 - » neuroblastoma and other peripheral nerve cell
 - » primitive neuroectodermal
 - » renal and sarcomas
 - » wilms
 - » yolk sac

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

- Horner's syndrome
- Pruritis
- Skin nodules
- Undifferentiated symptoms
- Vertebral fractures

Conditions

- Adult cancers presenting in childhood, such as nasopharyngeal carcinomas, gastrointestinal tumours
- All paediatric cancers can present with non-specific and undifferentiated symptoms, and in atypical locations
- Lymphoproliferative diseases and malignancies related to immunodeficiency, and infection, including post-transplant LPD
- Non-malignant conditions that are treated by oncologists as may benefit from similar pathways such as neurofibromatosis lesions
- Other leukaemia - chronic subtypes like CML, other variants

- Other rare solid tumours e.g. rhabdoid
- Paraneoplastic syndromes associated with various malignancies
- Premalignant haematological conditions
 - » myelodysplasia
 - » myeloproliferative disorders
- Skin cancers such as melanoma, Kaposi's sarcoma

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

- Anatomical pathology, cellular and molecular biology, genomics, biochemistry, pharmacology, immunology of cancer e.g. cancer immunology including biologics and immunotherapy
- Genetics of malignancy, underlying syndromes, genetic disorders and malignancy associations:
 - » Beckwith-Wiedemann
 - » Colonic polyps (FAP)
 - » Hepatoblastoma
 - » Li-Fraumeni
 - » NF1
 - » RB1
- Pathophysiological basis of malignant diseases including genetics and neoplasia development, and role of chronic inflammation

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

- Appropriate biopsies, tissue samples:
 - » cytology samples
 - cytopsin
 - FISH
 - IHC
 - » role for fine needle vs trucut vs excisional biopsies; image guided or open
 - » role for second opinions, central review
 - » role of morphology, immunohistochemistry, cytogenetic, molecular testing
 - » special samples as per clinical trial
 - » the importance of biobanking
- Appropriate molecular techniques, including
 - » chromosomal analyses
 - » FISH or other techniques for known translocations
 - » next-generation sequencing
 - » polymerase chain reaction
 - » precision medicine programmes
- Basic pathology
 - » basic blood tests
 - blood group
 - coagulation profile
 - FBE
 - LFT
 - UEC
- Cancer staging and varies by tumour type in paediatrics
- Establishing the diagnosis
- Full history and examination
- Imaging

- » Anatomical
 - CT
 - MRI
 - nuclear medicine scans
 - plain film
 - ultrasound
- » Functional scans
 - Metaiodobenzylguanidine
 - PET
- Other investigations
 - » audiology assessment
 - » ECG
 - » echocardiogram
 - » endoscopy
 - » fertility assessment and fertility preservation
 - » formal renal function, such as GFR, DTPA
 - » lung function
- Presentation of case at specialised multidisciplinary meeting, such as endocrine, adult specialists for some tumours
- Principles of management according to tumour type, including systemic treatment, local control measures which may include surgery, radiation
- Special tests
 - » AFP, BHCG, chromogranin A
 - » inflammatory markers- ESR, CRP
 - » plasma metanephrines
 - » tumour burden markers- LDH
 - » urine catecholamines
- Systemic treatment, chemotherapy may be as induction, and then consolidation, pre or post local control

Procedures

- Central line access as required
- Fertility preservation

Baseline height, weight, nutritional assessment, physical activity level.

- Other considerations
 - » all new diagnoses should be discussed with multidisciplinary team
 - » drug levels and toxicity monitoring
 - » drug sensitivity testing e.g. TPMT genotype for thiopurine
 - » enrol on appropriate clinical trials including precision medicine programs
 - » genetic testing including for predisposition syndromes as appropriate
 - » pharmacogenomics testing
 - » precision medicine assessment techniques and multi-disciplinary curation of results
 - » prophylactic treatment as indicated, e.g. immunoglobulin
 - » quality of life and patient reported symptom measures
 - » rehabilitation
 - » tumour surveillance post treatment and in at risk populations, including syndromes, genetic susceptibility, immunodeficiency, post infectious

**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.

Specific management issues

Cancer in children and adolescences is rare

General management considerations

- Adolescent and young adults unique requirements
 - Advanced care, including referral to palliative care for patients with advanced stage disease, recurrent/ relapsed disease and known poorer outcomes
 - Consideration of stresses related to social and peer interactions related to cancer and treatment including
 - » amputation
 - » hair loss
 - » weight changes
 - Goals of therapy
 - Multidisciplinary care in the management and treatment
 - Shared care with local practitioners for patients not living close to main treatment centres
 - Special considerations and communication related to age, developmental stage, and psychosocial circumstances of the patient
-

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Anaemia
- Bleeding, bruising and thromboses
- Joint bleeds in haemophilia
- Lethargy, iron deficiency
- Lymphopaenia
- Neutropaenia
- Neutrophilia dnlmphocytosis
- Pain, sickle cell crises
- Polycythemia
- Thrombocytopaenia
- Thrombocytosis

Conditions

- Acquired e.g. aplastic anaemia
- Bone marrow failure/ dysfunction
- Chest crisis
- Haematologic and thrombotic emergency conditions
- Haemolytic crisis
- Haemophilia
- Histiocytic disorders e.g. hemophagocytic lymphohistiocytosis
- Inherited
 - » blackfan diamond
 - » fanconi's anaemia
- Life or limb-threatening thrombosis
- Life threatening haemorrhage
- Lymphadenopathy
- More common bleeding disorders e.g. Von Willebrand's Disease
- Neutrophilia dnlmphocytosis
- Platelet disorders including
 - » Autoimmune processes e.g. Immune thrombocytopenic purpura (ITP)
 - » thrombocytopaenia
- Polycythemia
- Pulmonary embolus
- Splenic sequestration crisis
- Stroke
- Thrombocytosis

Red cell disorders

- Disorders of haemoglobin/haemoglobinopathies including
 - » sickle cell disease

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 patients⁶ and their quality of life when developing a management plan

Manage

- » provide evidence-based management
- » prescribe therapies tailored to

- » thalassaemia
- Haemolytic anaemia
- Nutritional anaemias, including
 - » iron deficiency
 - » megaloblastic anaemia
- Red cell membrane defects e.g. Hereditary spherocytosis

White cell disorders

- Disorders of haemostasis and thrombosis
- Haemophilia
- Histiocytic disorders e.g. Hemophagocytic lymphohistiocytosis
- Lymphadenopathy
- More common bleeding disorders e.g. Von Willebrand's Disease
- Neutropaenia
- Platelet disorders including thrombocytopaenia and autoimmune processes e.g. Immune thrombocytopenic purpura
- Thrombotic and bleeding disorders, including
 - » deep vein thrombosis
 - » pulmonary embolism

- 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
- » be aware of latest research
- » be aware of genetic implications and how to manage/ refer appropriately

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

- Atypical rashes
- Complicated post operative bleeding
- Known genetic familial disorders
- Myelodysplastic diseases/myeloproliferative neoplasms

Conditions

- Red cell disorders
 - » dyserythropoiesis
 - » other disorders of haemoglobin
 - » rare nutritional anaemias
 - » rarer
 - congenital haemolytic anaemias
 - red cell membrane defects such as hereditary elliptocytosis
 - » red cell enzyme deficiencies
 - » paroxysmal nocturnal haemoglobinuria
- White cell disorders
 - » eosinophila
 - » factor deficiencies e.g. Protein C deficiency
 - » neutrophil function defects
 - » rarer disorders of haemostasis and thrombosis
 - » storage diseases

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

- Blood film interpretation
- Coagulation pathways
- Genetic factors
- Risk factors for thrombosis

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 tests e.g. FBE
- Bone marrow aspiration/ trephine
- B12, folate
- Genetic testing
- More specific tests such as haptoglobin in DIC, haemolysis testing
- Reticulocyte count
 - » coagulation studies
 - » liver function tests
 - » iron studies, ferritin
- Thalassaemia screening

Procedures

- Anti-thrombotics, for instance in blocked central lines
- Appropriate referral to transfusion programmes
- Bone marrow aspiration/ trephine
- Blood product transfusions:
 - » indications and risks
 - » choice of irradiated, and other special requirements
 - » prescription and how to prescribe and transfuse
 - » management of complications and reactions, including
 - anaphylaxis
 - transfusion-related acute lung injury
- Imaging to assess thrombosis, including
 - » CT/ VQ scans for pulmonary emboli
 - » vascular ultrasounds
- Iron chelation therapy
- Other anti-thrombolysis techniques to be aware of
- Stem cell transplants
- Use of immunoglobulin

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.

Specific management considerations

- Involve specialist haematologist early in any complex haematological issue, and for ongoing specialist care
- Prompt management of bleeding issues, such as in a haemophilic patient
- Observation and prompt treatment as required post head trauma in patient at bleeding risk

General management considerations

- Advanced care
 - » known poorer outcomes
 - » recurrent/ relapsing disease

-
- » referral to palliative care for patients with advanced stage disease
 - AYA appropriate care
 - Compliance with treatments
 - Fertility preservation considerations pre definitive therapy, such as stem cell transplant in patient with thalassaemia or other genetic disorders
 - Genetic testing and implications
 - Goals of therapy
 - Impact of comorbidities on diagnosis and management
 - Individual patient clinical indications to determine patients' needs and the most appropriate approach to investigations and care
 - Monitoring and managing side effects during treatment
 - Multidisciplinary care in the management and treatment
 - Patient demographics, including geographic location, socioeconomic status, ethnicity, and cultural background, and the considerations when managing and following up these patients e.g. travel from rural to metropolitan areas
 - Shared care with local practitioners for patients not living close to main treatment centres
 - Special considerations related to age and developmental stage of the patient
 - Supportive care during cancer diagnosis and treatment, medical as well as psychosocial
 - Timing of decisions and risks for the individual patient
-

CLINICAL SCIENCES

Advanced Trainees will describe the principles of the foundational sciences.

Overriding principles of treatment

- Accurate diagnosis, knowing features and clinical presentations of childhood malignancy
- Indications and Principles of stem cell transplant, autologous and allogeneic, for high-risk oncology, benign haematology, and immunodeficiency disorders.
- Multidisciplinary care required in oncology management, with oncologists, surgeons, radiation oncologists, infectious disease teams, and including psychosocial support, and presentation at multidisciplinary management meetings appropriate to type of cancer
- Principle of curative intent for most diagnoses with systemic treatment and local control, with aim of long-term survival and use of least toxic therapy for cure
- Principles of biopsy, definitive surgery and optimal handling of tissue for diagnosis and biological studies
- Role of biological, genetic and molecular factors in diagnostics, prognosis and treatment

Understand the indications and basic principles of the major therapies used in cancer

- Medical supportive care, including
 - » blood product support
 - » infectious issues
 - antiemetics
 - antifungal prophylaxis
 - pneumocystis jirovecii infection (PJP) prophylaxis
 - treatment with antibiotics
 - » management of acute side effects e.g. constipation
 - » nutrition
- Radiotherapy
 - » basic scientific principles, indications, benefits and risks
 - » role of concurrent chemotherapy as a radiosensitiser
 - » the different techniques of therapy
 - brachytherapy
 - proton
 - photon
 - targeted e.g. MIBG
- Surgery
 - » in primary, relapse and palliative settings
 - complete resection
 - necrosis factor
 - wide local excisions
- Systemic anti-cancer therapies
 - » antibody-drug conjugates
 - » chemotherapy
 - » immunotherapy
 - » molecularly targeted therapy
 - » monoclonal antibodies
 - » theragnostic
 - » tumour vaccines
 - » tyrosine kinase inhibitors

- Transplant/cellular therapy
 - » basic scientific principles, indications, benefits and risks of
 - allogeneic stem cell transplant with understanding of donor selection
 - autologous stem cell transplant
 - different stem cell sources.
 - major conditioning chemotherapies
 - » Principles and indication of other forms of cellular therapies, including
 - CAR-T cell
 - cytotoxic
 - gene
 - T lymphocyte

Use of antiemetics

- For each pharmacological therapy, trainees should be able to describe
 - » pharmacology, pharmacokinetics and pharmacogenomics
 - » specific dosing considerations
 - » toxicity profile (acute and long term) and monitoring
- Assessment and adaptation of dose and scheduling
- Immunisation –preventative, during treatment and boosters post treatment as per local policy
- Principles of and application of stem cell collection and supported treatment, including autologous and allogeneic stem cell transplants
- Techniques for bone marrow support including use of growth factors

ELIGIBILITY CONSIDERATIONS

Advanced Trainees will assess the patient's current condition and plan the next steps.

Accurately identify and discuss the diagnosis, stage of cancer and goals of care

- Describe indications for specific anti-cancer therapies (pharmacological and non-pharmacological) in the neoadjuvant, definitive, concomitant, adjuvant and palliative settings
- Explain special conditions that influence the treatment, including age and developmental stage
- Identify the potential effect of a patient's comorbid medical conditions on the toxicity and efficacy of treatment
- Many drugs used off label as only previously tested in adults, with increasing trials in younger age groups of new agents
- Patient demographics, including geographic location, socioeconomic status, ethnicity, and cultural background, and the considerations when managing and following up these patients (e.g. travel from rural to metropolitan areas)
- Recognise the impact of socioeconomic, geographical, cultural, ethnic and psychological factors in the accessibility, suitability of specific treatments and compliance for patients, including
 - » culturally and linguistically diverse
 - » Māori and Aboriginal and Torres Strait Islander peoples
 - » rural
- Understand and offer fertility preservation options prior to commencing treatment
- Patient demographics, including
 - » cultural background
 - » considerations when managing and following up these patients e.g. travel from rural to metropolitan areas
 - » ethnicity
 - » geographic location
 - » socioeconomic status

LESS COMMON OR MORE COMPLEX PATIENT CONSIDERATIONS

Advanced Trainees will understand the resources that should be used to help manage patients.

- Conflicts in care decisions
- Delayed diagnoses
- Management of complex presentations
- Oncological emergencies
- Radiation techniques, timing, dose and extent
- Recognise the indications and role of repeating biopsies and predictive testing (e.g. repeating IHC or molecular testing after progression to guide future therapy)
- Recognition of complex interplay between medical and psychological comorbidities, socioeconomic and cultural factors in patient presentations, therapy choices and care wishes
- Specific surgical techniques including limb sparing, impacts on morbidity
- Underlying conditions that may impact on treatment, such as immunodeficiencies, genetic disorders

UNDERTAKING THERAPY

Advanced Trainees will monitor the progress of patients during the therapy.

- Adjustment to drug dosing as per body surface area of patient, toxicity, pharmacogenomics if known, drug/therapy interactions including radio sensitisation
- Continue revising management plan as required
- Enrolment on clinical trials if available and suitable and consented
- Follow protocol being used as per good clinical practice guidelines
- Knowledge of specific protocols and clinical guidelines for various conditions
- Measuring quality of life and patient reported outcomes
- Monitor patient closely during treatment for any acute of other side effects, and document appropriately
- Ongoing team management between various teams, including surgeons, radiation oncologists, infectious diseases and other speciality teams as required
- Re-present patients in multidisciplinary medical and psychosocial meetings to ensure optimal care

POST THERAPY

Advanced Trainees will know how to monitor and manage patients post-therapy.

- Long term follow up, survivorship care
- Monitor the management for any side effects post therapy, from original diagnosis, the different treatments used and psychosocial impacts.
- Post transplant care, management of complications
- Surveillance in cancer predisposition syndromes
- Transition to adult care, palliative care, other specialists in a timely fashion

Long term effects include:

- Distanced from expected normal behaviour, including
 - » education
 - » socialisation
 - » vocation
- Earlier morbidity and mortality from specific organ issues such as cardiac, vascular, lung dysfunction, central nervous system functioning, peripheral nervous issues, lethargy. Mood disorders, mental health issues
- Fertility issues, sexual issues
- Mental health issues
- Mood disorders
- Second malignancies

IMPORTANT SPECIFIC ISSUES

Advanced Trainees will identify important specialty-specific issues

Specific issues to this knowledge guide:

- Consider fertility preservation for all patients before treatment commences
- Importance of quality of life during treatment and associated need for supportive care, allied health support
- Principles of cancer drug development and the rapidly evolving landscape of clinical trials in cancer
- Principles of survivorship, including assessment of chronic/late drug toxicities and management of the fear of cancer recurrence

and the impact of these on diagnosis and management and integrate these into care.

- Recognise oncological emergencies and know how to manage
 - Review and modify management plans as required
 - Treatment dosing adjusted for pre-existing conditions, including
 - » obesity
 - » pharmacogenomics
-

DRAFT