

NEW CURRICULA

Advanced Training in Gastroenterology (Adult Medicine and Paediatrics & Child Health)

Curriculum standards



RACP
Specialists. Together

About this document

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

This document outlines the curriculum standards for Advanced Training in Gastroenterology for trainees and supervisors. The curriculum standards should be used in conjunction with the Advanced Training in Gastroenterology [LTA programs](#).

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Program overview

Purpose of Advanced Training

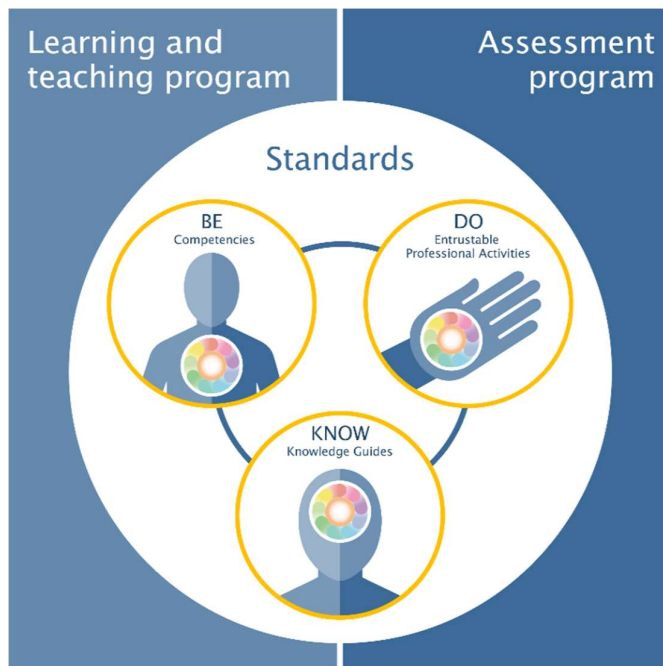
The RACP offers Advanced Training in 33 diverse medical specialties as part of Division, Chapter, or Faculty training programs.

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

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



RACP curriculum model



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

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

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

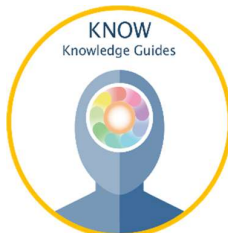
The **curricula standards** outline the educational objectives of the training program and the standard against which trainees' abilities are measured.



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



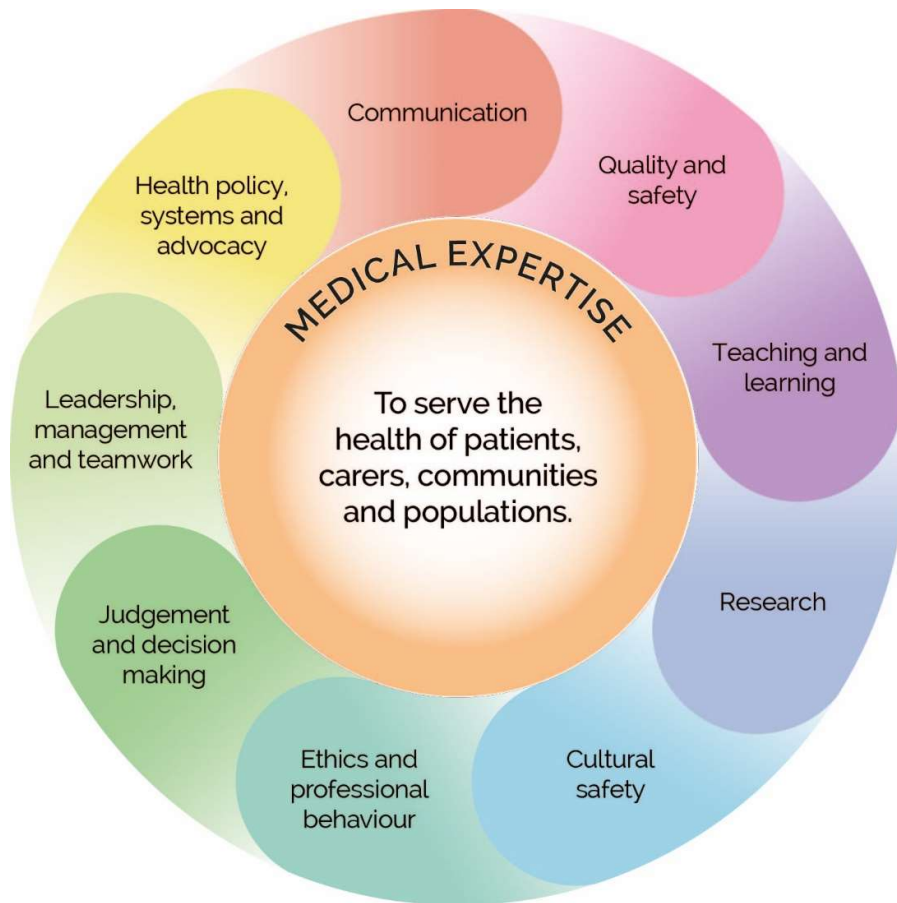
- **Entrustable Professional Activities** (EPAs) outline the essential work tasks trainees need to be able to perform in the workplace.



- **Knowledge guides** outline the expected baseline knowledge of trainees.

Professional Practice Framework

The Professional Practice Framework describes 10 domains of practice for all physicians.



Learning, teaching, and assessment structure

The learning, teaching, and assessment (LTA) structure defines the framework for delivery and trainee achievement of the curriculum standards in the Advanced Training program.

Advanced Training is structured in three phases. These phases will establish clear checkpoints for trainee progression and completion.

- | | |
|-----------------------------------|---|
| 1 Specialty foundation | <ul style="list-style-type: none">• Orient trainees and confirm their readiness to progress in the Advanced Training program. |
| 2 Specialty consolidation | <ul style="list-style-type: none">• Continue trainees' professional development in the specialty and support progress towards the learning goals. |
| 3 Transition to Fellowship | <ul style="list-style-type: none">• Confirm trainees' achievement of the curriculum standards, completion of Advanced Training, and admission to Fellowship.• Support trainees' transition to unsupervised practice. |



Figure 1: 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 full-time equivalent experience, and progression and completion decisions are based on evidence of trainees' competence.

Gastroenterology specialty overview

Gastroenterologists have expertise in the prevention, investigation, diagnosis, and management of diseases and disorders that affect the digestive system.

Gastroenterologists have strong clinical reasoning and decision-making skills, and work with a variety of patients with acute and chronic conditions to:

- **diagnose, treat, and manage gastrointestinal and hepatobiliary disorders.** Some of the common conditions include inflammatory bowel disease (IBD), liver disease (e.g. hepatitis or metabolic disease), pancreatic and biliary disease, disorders affecting function and motility, digestive health issues, gastrointestinal cancer, congenital or genetic conditions of the gastrointestinal tract, and gastrointestinal manifestations of psychiatric disorders.
- **provide acute care for gastrointestinal emergencies.** Certain gastrointestinal disorders can be life threatening and require emergency treatment. Gastroenterologists need to make robust decisions under pressure to ensure optimal patient outcomes.
- **perform diagnostic and therapeutic procedures.** Gastroenterologists apply the latest evidence-based technologies to assess, diagnose, treat, and manage gastrointestinal conditions. General gastroenterologists may perform a range of non-surgical investigations and procedures.
- **work with patients to improve nutrition.** Gastroenterology focuses on the health of the digestive system or the gastrointestinal tract. The gastrointestinal system is responsible for the digestion of food, absorption of nutrients, and removal of waste from the body. Achieving and maintaining good nutrition is a key component of managing the troubling symptoms of gastrointestinal and liver (especially fatty liver) conditions.

Gastroenterologists are compassionate and non-judgemental. They demonstrate this with all patients, including those with eating disorders, conditions secondary to substance abuse, and patients who may be embarrassed to seek help. To deliver safe patient care, gastroenterologists have a focus on leadership, education, and research, including:

- **leading and/or working as an integral member of multidisciplinary teams.** Gastroenterologists collaborate with other health professionals to make balanced and objective clinical decisions, and ensure each patient receives the best available treatment and management.
- **Educating patients and communities, and advocating for disease prevention.** Gastroenterologists play a key role in educating patients and communities, and in advocating for public health and disease prevention (e.g. hepatitis B vaccinations and awareness of fatty liver disease).
- **Managing resources for the benefit of patients and communities.** Gastroenterologists apply a biopsychosocial approach to ensure the delivery of efficient, cost-effective, and safe care for the benefit of their patients and communities.

- **applying a scholarly approach.** Gastroenterologists conduct academic research to discover better ways of understanding, diagnosing, treating, and preventing disease. They apply research to improve the treatment and management of patients.
- **demonstrating a commitment to teaching and learning.** Gastroenterologists are committed to maintaining lifelong excellence in practice through continuous professional development and fostering the learning of other health professionals through mentoring, supervision, and teaching.

Gastroenterology learning goals

The curriculum standards are summarised as 21 learning goals. The learning goals articulate what trainees need to be, do and know, and are assessed throughout training.

BE Competencies	1. Professional behaviours
DO EPAs	2. Team leadership 3. Supervision and teaching 4. Quality improvement 5. Clinical assessment and management, including prescribing 6. Acute care 7. Longitudinal care, including transitions and end-of-life 8. Communication with patients 9. Procedures 10. Investigations 11. Clinic management
KNOW Knowledge guides	12. Scientific foundations of gastroenterology 13. Gastrointestinal emergencies 14. Upper gastrointestinal and small bowel luminal disease 15. Lower gastrointestinal, luminal, and anal conditions 16. Liver disease/hepatology 17. Pancreatic and biliary disease 18. Inflammatory bowel disease 19. Gastrointestinal cancer 20. Function and motility 21. Nutrition

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 all or most training programs.

Learning goal 1: Professional behaviours



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.

¹ 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. Uses a range of effective and appropriate verbal, nonspeaking, and written communication techniques, including active listening.

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

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

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

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



Quality and safety

Professional standard. Physicians practice in a safe, high-quality manner within the limits of their expertise. Physicians regularly review and evaluate their own practice alongside peers and best practice standards and conduct continuous improvement activities.

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

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

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

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



Teaching and learning

Professional standard. Physicians demonstrate a lifelong commitment to excellence in practice through continuous learning and evaluating evidence. Physicians foster the learning of others in their profession through a commitment to mentoring, supervising, and teaching.²

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

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

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

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

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



Research

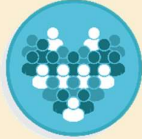
Professional standard. Physicians support creation, dissemination, and translation of knowledge and practices applicable to health. They do this by engaging with and critically appraising research and applying it in policy and practice to improve the health outcomes of patients and populations.

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.

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 backgrounds³.

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

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

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

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

*The RACP has adopted the Medical Council of New Zealand's definition of cultural safety:

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 care 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.*

³ Curtis et al. "Why cultural safety rather than cultural competency is required to achieve health equity".

International Journal for Equity in Health (2019) 18:174



Ethics and professional behaviour

Professional standard. Physicians' practice is founded upon ethics, and physicians always treat patients, their families, communities, and populations in a caring and respectful manner. Physicians demonstrate their commitment and accountability to the health and well-being 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 patients' 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 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, families, and carers, and other health care 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 limitations 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 health care team and function as an effective team member.



Health policy, systems, and advocacy

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

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

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

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

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

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

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

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

Entrustable Professional Activities

Entrustable Professional Activities (EPAs) outline the essential work tasks trainees need to be able to perform in the workplace without supervision by the end of training.



#	Theme	Title
2	<u>Team leadership</u>	Lead a team of health professionals
3	<u>Supervision and teaching</u>	Supervise and teach professional colleagues
4	<u>Quality improvement</u>	Identify and address failures in health care delivery
5	<u>Clinical assessment and management, including prescribing</u>	Clinically assess and manage the ongoing care of patients, including prescribing therapies tailored to patients' needs and conditions
6	<u>Acute care</u>	Manage the early care of acutely unwell patients
7	<u>Longitudinal care, including transitions and end-of-life</u>	Manage and coordinate the longitudinal care of patients with chronic illness, disability and/or long-term health issues, including transitions and end-of-life care
8	<u>Communication with patients</u>	Discuss diagnoses and management plans with patients
9	<u>Procedures</u>	Plan, prepare for, perform, and provide aftercare for important practical procedures
10	<u>Investigations</u>	Select, organise, and interpret investigations
11	<u>Clinic management</u>	Manage an outpatients clinic

Learning goal 2: Team leadership

Theme	Team leadership	
Title	Lead a team of health professionals	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">• prioritise workload• manage multiple concurrent tasks• articulate individual responsibilities, expertise, and accountability of team members• understand the range of team members' skills, expertise, and roles• acquire and apply leadership techniques in daily practice• collaborate with and motivate team members• encourage and adopt insights from team members• act as a role model.	
Behaviours		
Professional practice framework domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity
	The trainee will:	The trainee may:
Medical expertise	<ul style="list-style-type: none">• synthesise information from other disciplines to develop an optimal, goal-centred plan for the patient• 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 health care 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 patients⁴, families, carers, relevant professionals and/or the public in shared decision making• demonstrate rapport with people at all levels by tailoring messages to different stakeholders• work with patients, families, carers, and other health professionals to resolve conflict that may arise when planning and aligning goals	<ul style="list-style-type: none">• communicate adequately with colleagues• communicate adequately with patients, families, carers and/or the public• respect the roles of team members

⁴ References to patients in the remainder of this document may include their families and/or carers.

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 multidisciplinary collaboration to provide effective health services and operational change • use information resources and electronic medical record technology where available
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 their own performance • identify personal gaps in knowledge and skills, 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 	<ul style="list-style-type: none"> • accept feedback constructively, and change behaviour in response • recognise the limits of their personal expertise and involve other health professionals as needed • demonstrate basic skills in facilitating colleagues' learning
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 	<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 competence	<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, 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 • understand the ethics of resource allocation by aligning optimal patients and organisational care • effectively consult with stakeholders, achieving a balance of alternative views 	<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 • work effectively as a member of a team • promote team values of honesty, discipline, and commitment to continuous improvement

	<ul style="list-style-type: none"> • 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"> • 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 health care 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 	<ul style="list-style-type: none"> • understand the range of personal and other team members' skills, expertise, and roles • acknowledge and respect the contribution of all health professionals involved in patient 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 health care • advocate for the resources and support for health care 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 health care delivery • understand methods used to allocate resources to provide high-quality care • promote the development and use of organisational policies and procedures

Learning goal 3: Supervision and teaching

Theme	Supervision and teaching	
Title	Supervise and teach professional colleagues	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">• provide work-based teaching in a variety of settings• teach professional skills• create a safe and supportive learning environment• plan, deliver, and provide work-based assessments• encourage learners to be self-directed and identify learning experiences• supervise learners in day-to-day work and provide feedback• support learners to prepare for assessments.	
Behaviours		
<u>Professional practice framework domain</u>	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity
	The trainee will:	The trainee may:
Medical expertise	<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 learners to consider the rationale and appropriateness of investigation and management options	<ul style="list-style-type: none">• teach learners using basic knowledge and skills
Communication	<ul style="list-style-type: none">• listen and convey information clearly and considerately• 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• support learners to deliver clear, concise, and relevant information in both verbal and written communication• encourage learners to tailor communication as appropriate for different patients⁵ (e.g. younger or older people) and/or different populations	<ul style="list-style-type: none">• observe learners to reduce risks and improve health outcomes

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

Quality and safety	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> observe learners to reduce risks and improve health outcomes
Teaching and learning	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> demonstrate basic skills in the supervision of learners not tailor learning, assessments, and feedback to individual learners not match teaching and learning objectives clearly to outcomes not encourage learners to be self-directed
Research	<ul style="list-style-type: none"> clarify junior colleagues' research projects' goals and requirements, and provide feedback regarding the merits or challenges of proposed research monitor the progress of learners' research projects regularly, and may review research projects prior to submission support learners to find forums to present research projects encourage and guide learners to seek out relevant research to support practice 	<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 competence	<ul style="list-style-type: none"> 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

	<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 cultural competence • encourage learners to consider culturally appropriate care of Aboriginal and Torres Strait Islander and Māori peoples into patients' management 	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 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 personal and learners' effective performance and continuing professional development • maintain professional, clinical, research and/or administrative responsibilities while teaching • help to shape organisational culture to prioritise quality and work safety through openness, honesty, shared learning, and continued improvement • create an inclusive environment in which learners feel part of the team 	<ul style="list-style-type: none"> • demonstrate the principles and practice of professionalism and leadership in health care • 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 	<ul style="list-style-type: none"> • may not integrate public health principals into teaching and practice

Learning goal 4: Quality improvement

Theme	Quality improvement	
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• conduct and evaluate system improvement activities• adhere to best practice guidelines• audit clinical guidelines and outcomes• contribute to the development of policies and protocols designed to protect patients and enhance health care• monitor one’s own practice and develop individual improvement plans.	
Behaviours		
<u>Professional practice framework domain</u>	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity
	The trainee will:	The trainee may:
Medical expertise	<ul style="list-style-type: none">• use population health outcomes to identify opportunities for improvement in delivering appropriate care• 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• 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
Communication	<ul style="list-style-type: none">• support patients⁶ to have access to, and use, high-quality, easy-to-understand 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• discuss with patients any safety and quality concerns they have relating to their care• implement the organisation’s open disclosure policy	<ul style="list-style-type: none">• demonstrate awareness of the evidence for consumer engagement and its contribution to quality improvement in health care• apply knowledge of how health literacy might affect the way patients or populations gain access to, understand, and use health information
Quality and safety	<ul style="list-style-type: none">• demonstrate safety skills including infection control, adverse event reporting, and effective clinical handover	<ul style="list-style-type: none">• demonstrate understanding of a system approach to improving the quality and safety of health care

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

	<ul style="list-style-type: none"> participate in organisational quality and safety activities, including morbidity and mortality reviews and clinical incident reviews 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, and learn from incidents and complaints, to improve health care 	<ul style="list-style-type: none"> demonstrate understanding of the principles of root cause analyses (RCA) and corrective action preventative action (CAPA) plans, and participate as a member of the team if possible
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 safe, high-quality 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 	<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 competence	<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 health care 	<ul style="list-style-type: none"> access information and advice from other health care professionals 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 multidisciplinary programs of education 	<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

	<ul style="list-style-type: none"> actively involve clinical pharmacists in the medication use process 	
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 in which quality and safety issues are standing agenda items and innovative ideas and projects for improving care are actively encouraged measure, analyse, and report on 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 to shape an organisational culture that prioritises safety and quality through openness, honesty, learning, and quality improvement

Learning goal 5: Clinical assessment and management, including prescribing

Theme	Clinical assessment and management, including prescribing	
Title	Clinically assess and manage the ongoing care of patients, including prescribing	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">• identify and access sources of relevant information about patients• obtain patient histories• examine patients• synthesise findings to develop provisional and differential diagnoses• discuss findings with patients⁷, families, and/or carers• generate a management plan• present findings to other health professionals.	
Behaviours		
<u>Professional practice framework domain</u>	Ready to perform without supervision	Requires some supervision
	<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">• elicit an accurate, organised, and problem-focused medical history (including collateral 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• assess the severity of problems, the likelihood of complications, and clinical outcomes• identify and evaluate information relevant to the provisional and differential diagnosis• develop management plans based on relevant information, and integrate guidelines and consider the balance of benefit and harm by taking patients' personal sets of circumstances into account• review medicines regularly to reduce non-adherence, monitor treatment effectiveness, possible side effects, and drug interactions, and cease unnecessary medicines	<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• be aware of potential side effects and practical prescription points, such as medication compatibility and monitoring in response to therapies
Communication	<ul style="list-style-type: none">• communicate openly, listen, and take patients', families' or carers'	<ul style="list-style-type: none">• anticipate, read, and respond to verbal and nonspeaking cues

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

	<ul style="list-style-type: none"> concerns seriously, giving them adequate opportunity to question provide information to patients, family or carers to enable them to make a fully informed decision from various diagnostic, therapeutic, and management options communicate clearly, effectively, respectfully, and promptly with other health professionals involved in patients' care discuss and evaluate the risk and benefits of treatment options, making decisions in partnership with patients 	<ul style="list-style-type: none"> demonstrate active listening skills communicate patients' situations to colleagues, including senior clinicians
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 emergencies ensure that patients are informed of the material risks associated with any part of the proposed management plans assess indications, contraindications, safety profiles, and potential benefits when prescribing medications 	<ul style="list-style-type: none"> perform hand hygiene and take infection control precautions at appropriate moments take precaution against assaults from confused or agitated patients, and ensure appropriate care of patients document history and physical examination findings, and synthesise with clarity and completeness
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 turn clinical activities into an opportunity to teach, appropriate to the setting 	<ul style="list-style-type: none"> set unclear goals and objectives for self-learning self-reflect infrequently deliver teaching considering learners' level of training
Research	<ul style="list-style-type: none"> search for, find, compile, analyse, interpret, and evaluate information relevant to the research subject 	<ul style="list-style-type: none"> refer to guidelines and medical literature to assist in clinical assessments when required demonstrate an understanding of the limitations of the evidence and the challenges of applying research in daily practice
Cultural competence	<ul style="list-style-type: none"> acknowledge patients' beliefs and values, and how these might impact on health demonstrate effective and culturally competent 	<ul style="list-style-type: none"> display respect for patients' cultures and attentiveness to social determinants of health

	<ul style="list-style-type: none"> communication and care for Aboriginal and Torres Strait Islander and Māori peoples, and members of other cultural groups use a professional interpreter, a health advocate, or a family or community member to assist in communication with patients use plain language patient education materials, and be culturally and linguistically sensitive 	<ul style="list-style-type: none"> 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, and involve 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 consider the efficacy of medicines in treating illnesses, including the relative merits of different pharmacological and nonpharmacological options
Judgement and decision making	<ul style="list-style-type: none"> apply knowledge and experience to identify patients' problems make logical, rational decisions, and act to achieve positive patients' outcomes 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 evaluate new medicines in relation to their possible efficacy and safety profile for individual patients 	<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 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 » generic versus brand medicines » interactions » risk-benefit analysis
Leadership, management, and teamwork	<ul style="list-style-type: none"> work effectively as a member of multidisciplinary teams to achieve patients' best health outcomes demonstrate awareness of colleagues in difficulty, and work within the appropriate structural systems to support them while maintaining patient safety advocate for patients when conflicts occur between the medical team 	<ul style="list-style-type: none"> share relevant information with members of the health care team

<p>Health policy, systems, and advocacy</p>	<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 • prescribe in accordance with the organisational policy
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Learning goal 6: Acute care

Theme	Acute care	
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 or injured patients 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• lead the resuscitation team initially, and involve other necessary services• liaise with transport services and medical teams, including anaesthetists, surgeons, and theatre staff• perform this activity primarily in inpatient settings.	
Behaviours		
Professional practice framework domain	Ready to perform without supervision	Requires some supervision
	<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">• recognise immediately life-threatening conditions and deteriorating and critically unwell patients, and respond appropriately, including organisation and coordination of logistics for emergency procedures if required (e.g. emergency endoscopic procedures)• 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• 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• proactively, and in a timely manner, manage escalations or transitions of care• develop plans of multidisciplinary treatment, rehabilitation, and secondary prevention following acute events	<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">• recognise seriously unwell patients requiring immediate care, and respond appropriately• apply basic life support as indicated• understand 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
Medical expertise		

	<ul style="list-style-type: none"> provide clear and effective discharge summaries with recommendations for ongoing care 	
Communication	<ul style="list-style-type: none"> communicate clearly with other team members, and coordinate efforts of multidisciplinary team members use closed-loop and clear communication with other health care team members during resuscitation facilitate early communication with patients⁸, families, carers, and health care team members to allow for shared decision making negotiate realistic treatment goals, and determine and explain the expected prognosis and outcomes employ communication strategies appropriate for younger patients or those with cognitive difficulties explain the situation to patients in a sensitive and supportive manner, avoiding jargon, and confirm their understanding determine the level of health literacy and level of understanding of agreed care decisions of individual patients 	<ul style="list-style-type: none"> demonstrate communication skills to sufficiently support the function of multidisciplinary teams if possible, determine patients' understanding of their diseases and what they perceive as the most desirable goals of care
Quality and safety	<ul style="list-style-type: none"> maintain up-to-date certification in advanced life support use clinical information technology systems for conducting retrospective and prospective clinical audits evaluate and explain the benefits and risks of clinical interventions based on individual patients' circumstances analyse adverse incidents and sentinel events to identify system 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 	<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 quality and safety processes implemented within the workplace, and identify gaps in their structure
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 	<ul style="list-style-type: none"> coordinate and supervise junior colleagues from the emergency department and the wards provide constructive feedback to junior colleagues to contribute to improvements in individuals' skills mentor and train others to enhance team effectiveness

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

	<ul style="list-style-type: none"> in response to unanswered clinical questions seek guidance and feedback from health care teams to reflect on encounters and improve future patients' care 	
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 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 evidence and the challenges of applying research in daily practice
Cultural competence	<ul style="list-style-type: none"> negotiate healthcare decisions in a culturally appropriate way by considering variation in family structures, cultures, religion, or belief systems integrate culturally appropriate care of Aboriginal and Torres Strait Islander and Māori peoples into patients' management consider cultural, ethical, and religious values and beliefs in leading multidisciplinary teams 	<ul style="list-style-type: none"> practice cultural competency appropriate for the community serviced proactively identify barriers to access to health care
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, and direct to other care as appropriate facilitate interactions within multidisciplinary teams respecting values, encouraging involvement, and engaging all participants in decision making demonstrate critical reflection on personal beliefs and attitudes, including how these may affect patient care and health care policy 	<ul style="list-style-type: none"> communicate medical management plans as part of the 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 of care, and escalate to appropriate staff or services integrate evidence related to questions of diagnosis, therapy, prognosis, risks, and cause into clinical decision making 	<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

	<ul style="list-style-type: none"> reconcile conflicting advice from other specialties, and apply judgement in making clinical decisions in the presence of uncertainty use care pathways effectively, including identifying reasons for variations in care 	
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 use other team members based on their roles and skills ensure appropriate multidisciplinary assessments 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 use of resources responsibly, and balance costs against outcomes prioritise patient care based on needs, and consider available health care resources collaborate with emergency medicine staff and other colleagues to develop policies and protocols for the investigations and management of common acute medical problems 	<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 of care that lead to better patient outcomes

Learning goal 7: Longitudinal care, including transitions and end-of-life

Theme	Management of gastroenterological conditions from birth to adolescence, including transitions and end-of-life care	
Title	Manage and coordinate the longitudinal care of patients with complex gastroenterological conditions, including transitions and end-of-life	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">• develop management plans and goals in consultation with patients⁹, families and carers, including advanced care directives• manage complex and advanced chronic conditions, complications, disabilities, and comorbidities• collaborate with other health care providers, including transition of patient care• ensure continuity of care, including appropriate patient support for end-of-life care plans• facilitate patients', families' or carers' self-management and self-monitoring• engage with the broader health policy context.	
Behaviours		
<u>Professional practice framework domain</u>	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: <ul style="list-style-type: none">• regularly assess and review care plans for patients with chronic conditions and disabilities based on short- and long-term clinical and quality of life goals• provide documentation on patients' presentations, management and progress, including key points of diagnosis and decision making to inform coordination of care• ensure that patients contribute to their needs assessments and care planning• monitor treatment outcomes, effectiveness, and adverse events• facilitate an optimal transition of care for patients, including from paediatric to adult care• develop and clearly document individualised end-of-life care plans	The trainee may: <ul style="list-style-type: none">• assesses patients' knowledge, beliefs, concerns, and daily behaviours related to their chronic condition or disability and its management• accurately and sufficiently contribute to medical record entries on histories, examinations, and management plans as a member of multidisciplinary teams• demonstrate an understanding of the principles of care for patients at the end of their lives
	Communication	<ul style="list-style-type: none">• encourage patients' self-management through education to take greater responsibility for their care, and support problem solving• encourage patients' access to self-monitoring devices and assistive technologies

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

	<ul style="list-style-type: none"> communicate with multidisciplinary team members, and involve patients in that dialogue communicate with patients, families, or carers about transition of care, and engage and support these parties in decision making identify opportunities to discuss end-of-life care, aligning it with patients' values and preferences 	<p>their likelihood of success, risks and prognosis</p>
Quality and safety	<ul style="list-style-type: none"> maintain up-to-date certification use innovative models of chronic disease 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 	<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
Teaching and learning	<ul style="list-style-type: none"> contribute to the development of clinical pathways for 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
Research	<ul style="list-style-type: none"> prepare reviews of literature on patients' encounters to present at journal club meetings 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 (PICO) format recognise appropriate use of review articles
Cultural competence	<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 	<ul style="list-style-type: none"> provide culturally safe chronic disease management
Ethics and professional behaviour	<ul style="list-style-type: none"> share information about patients' health care, consistent with privacy laws and professional guidelines about confidentiality use consent processes for the release and exchange of health information assess patient decision-making capacity, and appropriately identify and use alternative decision makers 	<ul style="list-style-type: none"> share information between relevant service providers acknowledge and respect the contribution of health professionals involved in patients' care

Judgement and decision making	<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 • recognise appropriate stages of end-of-life and limitation of treatment 	<ul style="list-style-type: none"> • recognise personal limitations, and seek help in an appropriate way when required
Leadership, management, and teamwork	<ul style="list-style-type: none"> • use a multidisciplinary approach across services to manage patients with chronic diseases and disabilities • develop collaborative relationships with patients, families, or carers, and a range of health professionals • coordinate whole-person care through involvement in all stages of the patients' care journey • effectively manage challenges of dealing with death and grief 	<ul style="list-style-type: none"> • participate in multidisciplinary team care for patients with chronic diseases and disabilities, including organisational and community care on a continuing basis appropriate to patient context
Health policy, systems, and advocacy	<ul style="list-style-type: none"> • use health screening for early intervention and chronic diseases management • assess alternative models of health care delivery to patients with chronic diseases and disabilities • participate in government initiatives for chronic diseases management to reduce hospital admissions and to improve patients' quality of life • help patients access initiatives and services for patients with chronic diseases and disabilities 	<ul style="list-style-type: none"> • demonstrate awareness of government initiatives and services available for patients with chronic diseases and disabilities, and knowledge of how to access them

Learning goal 8: Communication with patients

Theme	Communication with patients	
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 or carers and other team members• select and use appropriate modalities and communication strategies• adopt a patient-centred perspective, including adjusting for age, gender identity, cognition, and disability• structure conversations intentionally• negotiate a mutually agreed management plan• verify patient¹⁰, family, or carer understanding of information conveyed• develop and implement a plan for ensuring actions occur• ensure the conversation is documented.	
Behaviours		
<u>Professional practice framework domain</u>	Ready to perform without supervision	Requires some supervision
	<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">• anticipate and be able to correct any misunderstandings patients may have about their conditions and/or risk factors• inform patients of all aspects of their clinical management, including assessments and investigations, and give them adequate opportunity to question or refuse interventions and treatments• seek to understand the concerns and goals of patients, and to plan management in partnership with them• provide information to patients to enable them to make an informed decision about diagnostic, therapeutic and management options	<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">• apply knowledge of the scientific basis of health and disease to the management of patients• demonstrate an understanding of the clinical problems being discussed• formulate management plans in partnership with patients
Medical expertise		
Communication	<ul style="list-style-type: none">• select appropriate strategy and modality for communication (e.g. face-to-face, email, or phone calls)• use chosen communication modalities in a professional and ethical manner, considering confidentiality and medicolegal implications (e.g. confidentiality and information security of electronic communication)• ensure appropriate documentation of all communications with and/or	<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, physical, cultural, socioeconomic, and situational factors

¹⁰ References to patients in the remainder of this document may include their families and/or carers.

	<p>regarding patients with other health professionals, such as ensuring phone calls, texts, and emails are captured in medicolegal notes</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 to explain the management plan in their own words, to verify understanding • convey information considerately and sensitively to patients, and seek clarification if unsure of how best to proceed • treat children and young people respectfully, and listen to their views • recognise the role of family or carers and, when appropriate, encourage patients to involve their family or carers in decisions about their care 	<ul style="list-style-type: none"> • collaborate with patient liaison officers as required
Quality and safety	<ul style="list-style-type: none"> • discuss with patients their condition and the available management options, including their potential benefits and harms • provide information to patients in a way they can understand before asking for consent • consider young people's capacity for decision making and consent • recognise and take precautions where patients may be vulnerable, such as issues of child protection, self-harm, or elder abuse • participate in processes to manage patients' complaints 	<ul style="list-style-type: none"> • inform patients of the material risks associated with proposed management plans • treat information about patients as confidential
Teaching and learning	<ul style="list-style-type: none"> • discuss the aetiology of diseases and explain the purpose, nature, and extent of assessments to be conducted • obtain informed consent or other valid authority before involving patients in teaching 	<ul style="list-style-type: none"> • respond appropriately to information sourced by patients and to patients' knowledge regarding their condition
Research	<ul style="list-style-type: none"> • provide information to patients that is based on guidelines issued by the National Health and Medical Research Council and/or Health Research Council of NZ • provide information to patients in a way they can understand 	<ul style="list-style-type: none"> • demonstrate an understanding of the limitations of the evidence, and the challenges of applying research in daily practice • refer to evidence-based clinical guidelines

	<ul style="list-style-type: none"> before asking for their consent to participate in research obtain informed consent or other valid authority before involving patients in research 	
Cultural competence	<ul style="list-style-type: none"> demonstrate effective and culturally competent communication with Aboriginal and Torres Strait Islander and Māori peoples effectively communicate with members of other cultural groups by meeting patients' specific language, cultural, and communication needs when necessary, use qualified language interpreters or cultural interpreters to help to meet patients' communication needs provide plain language and culturally appropriate written materials to patients when possible 	<ul style="list-style-type: none"> identify when to use interpreters allow enough time for communication across linguistic and cultural barriers
Ethics and professional behaviour	<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 are making decisions encourage and support patients and, when relevant, their families or carers, in caring for themselves and managing their health demonstrate respectful professional relationships with patients prioritise honesty, patient 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 	<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, social and economic status, sexual preferences, beliefs, contribution to society, illness-related behaviours or the illness itself use social media ethically and according to legal obligations to protect patients' confidentiality and privacy
Leadership, management, and teamwork	<ul style="list-style-type: none"> communicate effectively with health care team members involved in patients' care, and with patients, families and carers discuss medical assessments, treatment plans, and investigations with patients and primary care teams, and work collaboratively with them discuss patients' care needs with health care team members to align them with the appropriate resources 	<ul style="list-style-type: none"> answer questions from team members summarise, clarify, and communicate responsibilities of health care team members keep health care team members focused on patient outcomes

	<ul style="list-style-type: none"> • facilitate an environment in which all team members feel they can contribute and their opinion is valued • communicate accurately and succinctly, and motivate others on the health care 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 	<ul style="list-style-type: none"> • communicate with and involve other health professionals as appropriate

Learning goal 9: Procedures

Theme	Procedures	
Title	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 appropriate procedures in partnership with patients¹¹, families, or carers, and other involved health professionals• obtain informed consent• set up the equipment, maintaining infection control• perform procedures• manage unexpected events and complications during and after procedures• provide aftercare for patients• communicate aftercare protocols and instructions to patients and medical and nursing staff• interpret the results and outcomes of procedures, including imaging and reports• communicate the outcome of the procedure and associated investigations to patients• perform this activity across multiple relevant settings.	
Behaviours		
<u>Professional practice framework domain</u>	Ready to perform without supervision	Requires some supervision
	<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">• select procedures by assessing available evidence, patient-specific factors, risks, benefits, and alternatives• confidently and consistently perform a range of common procedures• ensure that team members are aware of all allergies/adverse reactions identified, and take precautions to avoid allergies/adverse reactions during procedures• ensure patients have complied with pre-procedure preparation• confirm the correct position/site/side/level on the patient for planned procedures• recognise and effectively manage complications arising during or after procedures• recognise and correctly interpret normal and abnormal findings of diagnostic procedures	<ul style="list-style-type: none">• assess patients and identify indications for procedures• check for allergies and adverse reactions• consider risks and complications of procedures• interpret results of common diagnostic procedures• organise and document postprocedure reviews of patients
Communication	<ul style="list-style-type: none">• accurately document procedures in the clinical notes, including informed consent, procedures	<ul style="list-style-type: none">• explain the process of procedures to patients without providing a broader context

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

	<p>requested and performed, reasons for procedures, medicines given, infection control technique, and aftercare</p> <ul style="list-style-type: none"> • explain procedures clearly to patients, families and carers, including reasons for procedures, potential alternatives, and possible risks, to facilitate informed choices • counsel patients sensitively and effectively, and support them to make informed choices • address patients', families and carers' concerns relating to procedures, providing opportunities to ask questions • tailor language according to patients' age and capacity to understand • communicate effectively with team members, patients, families, and carers prior to, during, and after procedures • ensure team members are confident and competent in their assigned roles 	<ul style="list-style-type: none"> • help patients, families and carers to choose procedures • communicate with members of procedural teams so all team members understand who each member is • discuss postprocedural care with patients, families and carers • complete relevant patients' documentation, and conduct an appropriate clinical handover
Quality and safety	<ul style="list-style-type: none"> • maintain up-to-date certification for procedures, including records of completed procedures for quality assurance purposes • obtain informed consent or other valid authority before undertaking any procedure • set up all necessary equipment, and consistently use universal precautions and infection control techniques • confirm patients' identification, verify the procedure, and, where appropriate, the correct site/side/level for procedures • ensure that information on patients' consent forms matches procedures to be performed • identify, document, and appropriately notify of any adverse events or equipment malfunctions • assess patients in immediate postprocedural state for complications, and respond appropriately 	<ul style="list-style-type: none"> • provide information in a manner so that patients, families, or carers are fully informed when consenting to procedures • demonstrate an inconsistent application of infection control technique • identify patients using approved patients' identifiers before any treatment or intervention is initiated • attempt to perform a procedure in an unsafe environment
Teaching and learning	<ul style="list-style-type: none"> • refer to and/or be familiar with relevant published procedural guidelines prior to undertaking procedures • organise or participate in in-service training on new technology • provide specific and constructive feedback and comments to junior colleagues 	<ul style="list-style-type: none"> • participate in continued professional development • help junior colleagues develop new skills • actively seek feedback on personal techniques until competent

	<ul style="list-style-type: none"> initiate and conduct skills training for junior staff 	
Cultural competence	<ul style="list-style-type: none"> 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"> confidently perform common procedures identify appropriate proxy decision makers when required show respect for knowledge and expertise of colleagues maximise patient autonomy in decision making recognise own limitations, including scope of expertise, and seek help when required 	<ul style="list-style-type: none"> perform procedures when adequately supervised recognise own limitations, including scope of expertise, and seek help when required follow procedures to ensure safe practice
Judgement and decision making	<ul style="list-style-type: none"> identify roles and optimal timing for diagnostic procedures critically appraise information from assessments, and evaluations of risks and benefits, to prioritise patients on waiting lists make clinical judgements and decisions based on the available evidence select the most appropriate and cost-effective diagnostic procedures adapt procedures in response to assessments of risks to individual patients select appropriate investigations on the samples obtained in diagnostic procedures 	<ul style="list-style-type: none"> prioritise which patients receive procedures first, if there is a waiting list assess personal skill level, and seek help with procedures when appropriate use tools and guidelines to support decision making recommend suboptimal procedures for patients
Leadership, management, and teamwork	<ul style="list-style-type: none"> explain critical steps, anticipated events, and equipment requirements to teams on planned procedures provide staff with clear aftercare instructions, and explain how to recognise possible complications identify relevant management options with colleagues, according to their level of training and experience, to reduce errors, prevent complications, and support efficient teamwork coordinate efforts, encourage others, and accept responsibility for work done 	<ul style="list-style-type: none"> ensure all relevant team members are aware that a procedure is occurring discuss patients' management plans for recovery with colleagues

Health policy,
systems, and
advocacy

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

Learning goal 10: Investigations

Theme	Investigations	
Title	Select, organise, and interpret investigations	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">select, plan, and use evidence-based clinically appropriate investigationsprioritise patients receiving investigations, if there is a waiting listevaluate the anticipated value of investigationswork in partnership with patients¹², their families, or carers to facilitate choices that are right for themprovide aftercare for patients if neededinterpret the results and outcomes of investigationscommunicate the outcomes of the investigations to patients.	
Behaviours		
Professional practice framework domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity
	The trainee will:	The trainee may:
Medical expertise	<ul style="list-style-type: none">choose evidence-based investigations and frame them as an adjunct to comprehensive clinical assessmentsassess patients' concerns, and determine the need for tests that are likely to result in overall benefitdevelop plans for investigations, identifying their roles and timingrecognise and correctly interpret abnormal findings considering patients' specific circumstances, and act accordingly	<ul style="list-style-type: none">provide rationale for investigationsunderstand the significance of abnormal test results, and act on theseconsider patient factors and comorbiditiesconsider age-specific reference ranges
Communication	<ul style="list-style-type: none">explain options to patients, with the potential benefits, risks, costs, burdens, and side effects of each option, including the option to have no investigationsuse clear and simple language, and check that patients understand the terms used, and that they agree to proceed with proposed investigationsidentify patients' concerns and expectations, and provide adequate explanations on the rationale for individual test orderingconfirm whether patients have understood the information they have been given, and the need for more information before deciding	<ul style="list-style-type: none">discuss the indications, risks, benefits, and complications of investigations with patients before ordering investigationsexplain the results of investigations to patientsarrange investigations providing accurate and informative referrals, liaising with other services where appropriate

¹² References to patients in the remainder of this document may include their families and/or carers.

	<ul style="list-style-type: none"> • use written material, visual, or other aids, that are accurate and up to date, to support discussions with patients • explain findings or possible outcomes of investigations to patients, families, and carers • give information that patients may find distressing in a considerate way 	
Quality and safety	<ul style="list-style-type: none"> • identify adverse outcomes that may result from proposed investigations, focusing on patients' individual situations • ensure adequate documentation and storage of results • promptly follow up results to ensure findings are acted on in a timely way 	<ul style="list-style-type: none"> • consider safety aspects of investigations when planning them • seek help with interpretation of test results for less common tests or indications, or unexpected results • attempt to perform a procedure in an unsafe environment
Teaching and learning	<ul style="list-style-type: none"> • use appropriate guidelines, evidence sources, and decision support tools • participate in clinical audits to improve test ordering strategies for diagnoses and screening 	<ul style="list-style-type: none"> • undertake professional development to maintain currency with investigation guidelines
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 	<ul style="list-style-type: none"> • refer to evidence-based clinical guidelines • consult current research on investigations
Cultural competence	<ul style="list-style-type: none"> • understand patients' views and preferences about any proposed investigation and the adverse outcomes they are most concerned about 	<ul style="list-style-type: none"> • consider patients' cultural and religious backgrounds, attitudes, and beliefs, and how these might influence the acceptability of proposed investigations
Ethics and professional behaviour	<ul style="list-style-type: none"> • act in accordance with the scope of the authority (e.g. advanced care directives, power of attorney) • discuss with patients how decisions will be made once the investigation has started and the patient is not able to participate in decision making • respect patients' decisions to refuse investigations, 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 before obtaining informed consent or other valid authority • demonstrate awareness of complex issues related to genetic 	<ul style="list-style-type: none"> • identify appropriate proxy decision makers when required • choose not to investigate in situations where it is not appropriate for ethical reasons • practice within current ethical and professional frameworks • practice within own limits, and seek help when needed • involve patients in decision making regarding investigations, and obtain the appropriate informed consent, including financial consent if necessary

	information obtained from investigations, and subsequent disclosure of such information	
Judgement and decision making	<ul style="list-style-type: none"> • evaluate the costs, benefits, and potential risks of each investigation in a clinical situation • adjust investigative paths depending on test results received • consider whether patients' conditions may get worse or better if no tests are selected 	<ul style="list-style-type: none"> • choose the most appropriate investigations for the clinical scenario in discussion with patients • recognise personal limitations and seek help in an appropriate way when required
Leadership, management, and teamwork	<ul style="list-style-type: none"> • consider the role other members of the health care team might play, and what other sources of information and support are available • ensure results are checked in a timely manner, and take responsibility for following up on results 	<ul style="list-style-type: none"> • demonstrate understanding of what parts of an investigation are provided by different doctors or health professionals
Health policy, systems, and advocacy	<ul style="list-style-type: none"> • select and justify investigations regarding the pathological basis of disease, utility, safety, appropriateness, and cost • consider resource utilisation through peer review of testing behaviours 	

Learning goal 11: Clinic management

Theme	Clinic management	
Title	Manage an outpatients clinic	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none"> • manage medical procedures and treatments • manage clinic services, including triage and waitlist management • oversee quality improvement activities • communicate with patients¹³ • liaise with other health professionals and team members • demonstrate problem-solving skills • responsibly use public resources. 	
Behaviours		
<u>Professional practice framework domain</u>	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
	The trainee will:	The trainee may:
Medical expertise	<ul style="list-style-type: none"> • effectively identify and address current clinical concerns as well as longer-term clinical objectives, as appropriate to patient context • evaluate environmental and lifestyle health risks, and advocate for healthy lifestyle choices • create accurate and appropriately prioritised problem lists in the clinical notes or as part of an ambulatory care review • update documentation in a time frame appropriate to the clinical situation of patients 	<ul style="list-style-type: none"> • demonstrate understanding of the importance of prevention, early detection, health maintenance, and chronic condition management
Communication	<ul style="list-style-type: none"> • help patients navigate the healthcare system to improve access to care by collaboration with other services, such as community health centres and consumer organisations • link patients to specific community-based health programs and group education programs 	<ul style="list-style-type: none"> • wherever practical, meet patients' specific language and communication needs • facilitate appropriate use of interpreter services and translated materials
Quality and safety	<ul style="list-style-type: none"> • practice health care that maximises patient safety • adopt a systematic approach to the review and improvement of professional practice in the outpatients clinic setting • identify aspects of service provision that may be a risk to patients' safety 	<ul style="list-style-type: none"> • take reasonable steps to address issues if patient safety may be compromised • understand a systematic approach to improving the quality and safety of health care • participate in organisational quality and safety activities, including clinical incident reviews

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

	<ul style="list-style-type: none"> ensure patients are informed about fees and charges 	
Teaching and learning	<ul style="list-style-type: none"> evaluate their own professional practice demonstrate learning behaviour and skills in educating junior colleagues contribute to the generation of knowledge maintain professional continuing education standards relevant to the profession 	<ul style="list-style-type: none"> recognise the limits of personal expertise and involve other professionals as needed to contribute to patients' care use information technology appropriately as a resource for modern medical practice
Research	<ul style="list-style-type: none"> obtain informed consent or other valid authority before involving patients in research inform patients about their rights, the purpose of the research, the procedures to be undergone, and the potential risks and benefits of participation before obtaining consent 	<ul style="list-style-type: none"> refer to evidence-based clinical guidelines consult current research on investigations
Cultural competence	<ul style="list-style-type: none"> apply knowledge of the cultural needs of the community serving and how to shape service to those people mitigate the influence of own culture and beliefs on interactions with patients and decision making adapt practice to improve patient engagement and healthcare outcomes 	<ul style="list-style-type: none"> acknowledge the social, economic, cultural, and behavioural factors influencing health, at individual and population levels
Ethics and professional behaviour	<ul style="list-style-type: none"> identify and respect the boundaries that define professional and therapeutic relationships respect the roles and expertise of other health professionals comply with the legal requirements of preparing and managing documentation demonstrate awareness of financial and other conflicts of interest 	<ul style="list-style-type: none"> understand the responsibility to protect and advance the health and wellbeing of individuals and communities maintain the confidentiality of documentation, and store clinical notes appropriately ensure that the use of social media is consistent with ethical and legal obligations
Judgement and decision making	<ul style="list-style-type: none"> understand the principles of assessing urgency of care, and triage appropriately integrate prevention, early detection, health maintenance, and chronic condition management, where relevant, into clinical practice work to achieve optimal and cost-effective patients' care that allows maximum benefit from the available resources 	<ul style="list-style-type: none"> understand the appropriate use of human resources, diagnostic interventions, therapeutic modalities, and health care facilities
Leadership, management, and teamwork	<ul style="list-style-type: none"> prepare for and conduct clinical encounters in a well-organised and time-efficient manner support colleagues who raise concerns about patient safety 	<ul style="list-style-type: none"> attend relevant clinical meetings regularly

	<ul style="list-style-type: none"> • work effectively as a member of multidisciplinary teams or other professional groups • ensure all important discussions with colleagues, multidisciplinary team members, and patients are appropriately documented • review discharge summaries, notes, and other communications written by junior colleagues 	
Health policy, systems, and advocacy	<ul style="list-style-type: none"> • demonstrate capacity to engage in the surveillance and monitoring of the health status of populations in the outpatient setting • maintain good relationships with health agencies and services • advocate for adequate resources, and apply the principles of efficient and equitable allocation of resources to meet individual, community, and national health needs 	<ul style="list-style-type: none"> • understand common population health screening and prevention approaches

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.

Knowledge guides are specialty specific.

The knowledge guides listed below have been developed for the Advanced Training in Gastroenterology program.



#	Title
12	Scientific foundations of gastroenterology
13	Gastrointestinal emergencies
14	Upper GI and small bowel luminal disease
15	Lower GI, luminal, and anal conditions
16	Liver disease/hepatology
17	Pancreatic and biliary disease
18	Inflammatory bowel disease (IBD)
19	Gastrointestinal cancer
20	Function and motility
21	Nutrition

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.

- Anatomical changes and physiological effects of surgery/endoscopy, including:
 - » hepatopancreatobiliary
 - » lower gastrointestinal
 - » upper gastrointestinal
- Anatomy, including embryology of the gastrointestinal tract
- Causes and management of gastrointestinal neoplasia
- Normal and abnormal histopathology of the gastrointestinal tract
- Normal and abnormal physiology of the gastrointestinal tract, including processes underlying digestion, absorption, and metabolism
- Principles of genetics, including molecular markers of gastrointestinal disease
- Principles of health economics (e.g. screening)
- Principles of nutrition (see KG10)
- Principles of pharmacology and pharmacotherapy
- Principles of public health (e.g. bowel cancer, fatty liver, viral hepatitis)

PCH

- Development of the gastrointestinal system
- Common embryological and congenital defects/disorders of the gastrointestinal system (e.g. biliary atresia, TOF/OA)

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 patients¹⁴, families, and carers, and be able to explain procedural risk and obtain informed consent where applicable.

- Anorectal physiology studies
- Capsule endoscopy
- Endoscopic retrograde cholangiopancreatography
- Endoscopic ultrasound
- Enteroscopy
- Gastrointestinal radiology:
 - » diagnostic, including intestinal ultrasound
 - » interventional
- Liver stiffness measurement
- Nuclear medicine studies
- Oesophageal physiology studies
- Principles of gastrointestinal endoscopy:
 - » electrosurgery and safety
 - » indications for endoscopic procedures
 - » lower gastrointestinal endoscopy
 - » risks and complications of gastrointestinal endoscopic procedures
 - » therapeutic endoscopy
 - » understanding of endoscopic equipment and its use, including image enhancement and analysis and artificial intelligence software
 - » upper gastrointestinal endoscopy
- Recognition of pathology (macro and micro)

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

IMPORTANT SPECIFIC ISSUES

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

General management considerations

- Goals of therapy
 - Impact of comorbidities on diagnosis and management
 - Individual patients' clinical indications to determine patients' needs, and the most appropriate approach to investigations and care
 - Patient demographics, including geographical location, socioeconomic status, ethnicity, or cultural background, and the considerations when managing and following up these patients (e.g. travel from rural to metropolitan areas)
 - Psychosocial aspects of gastrointestinal disorders
 - The timing of decisions and risks for individual patients
-

KEY PRESENTATIONS AND CONDITIONS

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

Presentations and conditions

- Acute abdominal pain
 - » non-surgical
 - » surgical
- Acute gastrointestinal (GI) bleeding:
 - » lower GI
 - » upper GI (non-variceal and variceal)
- Acute septic patient
- Decompensated liver disease (ascites, encephalopathy, variceal bleeding)
- Fulminant colitis, including toxic megacolon
- Fulminant liver failure (e.g. paracetamol poisoning)
- Ingested foreign bodies (e.g. caustic ingestion, oesophageal button batteries) and food bolus obstruction
- Intestinal obstruction
- Jaundice, including:
 - » cholangitis
 - » obstructive jaundice
- Liver failure:
 - » acute and chronic
 - » acute on chronic
- Perforated viscus
- Portal hypertension
- Post-endoscopic complications (life-threatening)
- Severe pancreatitis

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 patients¹⁵ and their quality of life when developing management plans

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

PCH

- Neonatal/Infantile acholic stools

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

- Gastroenterological conditions associated with portal hypertension (e.g. ascites, encephalopathy, hepatorenal syndrome, spontaneous bacterial peritonitis, varices)
- Relevant pharmacology and pharmacotherapy
- Resuscitation, including:
 - » blood product resuscitation
 - » management of coagulopathy

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

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.

- Know indications and process for liver transplant referral
- Know indications for and basic interpretations of:
 - » emergency endoscopic procedures and triaging of timing of procedures
 - » intervention, including surgery and interventional radiology
 - » radiology
- Know which test(s) to order and when
- Surgical review (e.g. fulminant colitis, suspected intestinal perforation)

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 rules and categories of triage
 - Psychosocial aspects of gastrointestinal disorders, including psychiatric review
-

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Bloating
- Diarrhoea
- Dyspepsia
- Dysphagia
- Gastrointestinal bleeding
- Heartburn
- Iron deficiency
- Nausea and vomiting
- Odynophagia
- Pain (abdominal and chest)
- Weight loss

Conditions

- Barrett's oesophagus
- Coeliac disease
- Disorders of gastro-oesophageal motility (functional and pathological)
- Drug side effects or consequences
- Eosinophilic oesophagitis
- Functional gut disorders (see KG9)
- Gastric intestinal metaplasia
- Gastro-oesophageal reflux disease
- Helicobacter pylori infection
- Peptic ulcer disease
- Post-surgical conditions (e.g. dumping)
- Strictures (benign and malignant)
- Upper gastrointestinal tumours (benign and malignant)

- Duplication cysts
- Malrotation
- Pyloric stenosis
- Tracheoesophageal fistula

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 patients¹⁶ 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

LESS COMMON OR MORE COMPLEX PRESENTATIONS AND CONDITIONS

Advanced Trainees will understand these presentations and conditions.

Conditions

- Autoimmune enteropathy
- Eosinophilic gastrointestinal diseases
- Primary immunodeficiency (e.g. CVID)
- Small intestinal bacterial overgrowth

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

Advanced Trainees will understand the resources that should be used to help manage patients with these presentations and conditions.	<ul style="list-style-type: none"> • Upper gastrointestinal infections (non-opportunistic and opportunistic) 	
	<ul style="list-style-type: none"> • Duodenal webs • Intestinal atresias • Oesophageal stenosis 	

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

- Barrett's oesophagus
- Coeliac disease
- Eosinophilic oesophagitis
- *Helicobacter pylori* (*H. pylori*) infection
- Peptic ulcer disease
- Upper gastrointestinal tumours (benign and malignant)

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.

- Indications for referral to and risks of endoscopy, including:
 - » capsule endoscopy
 - » endoscopic ultrasound (EUS)
 - » enteroscopy
 - » interventional endoscopic procedures (e.g. Barrett's oesophagus therapies, mucosal and submucosal resection, peroral endoscopic myotomy [POEM], stenting)
 - » upper gastrointestinal endoscopy
- Know indications for surgical referral, including associated risks and post-operative management (e.g. for treatment of bariatric patients, bleeding, perforation, reflux, tumours)
- Oesophageal manometry
- Pathology:
 - » clinico-pathologic correlation (macroscopic and microscopic)
 - » routine laboratory tests, including immunohistochemistry and molecular biology techniques (e.g. flow cytometry, in situ hybridisation, PCR)
 - » understanding of the appropriate test and sample collection and handling requirements
- Role of diagnostic and interventional radiology:
 - » angiography, embolization
 - » CT, GI contrast studies, MRI, nuclear medicine, PET, plain films, ultrasound

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Abdominal pain
- Anal pain/pruritis
- Bleeding
- Constipation
- Diarrhoea (acute versus chronic)
- Endoscopic findings:
 - » angiodysplasia
 - » polyps
- Imaging findings
- Weight loss

Conditions

- Anorectal disease
- Colitis:
 - » infective (e.g. *Clostridium difficile* colitis)
 - » infiltrative
 - » inflammatory bowel disease (see KG7)
 - » ischaemic colitis
 - » microscopic
 - » parasitic
 - » viral
- Colonic angiodysplasia
- Colonic obstruction/pseudo-obstruction
- Colorectal carcinoma
- Colorectal polyposis syndromes
- Diverticular disease
- Functional lower gastrointestinal conditions
- Gastroenteritis
- Intussusception
- Mesenteric ischaemia
- Rectal bleeding (see KG2)
- Short bowel syndrome

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

Synthesise

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

Manage

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

Consider other factors

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

PCH

Conditions

- Allergic colitis
- Retentive and non-retentive soiling

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

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.

Conditions

- Developmental anomalies
- Intestinal neoplasms (other than colorectal cancer):
 - » lymphomas
 - » neuroendocrine
- Megacolon:
 - » acquired
 - » congenital

PCH

Presentations

- Congenital anomalies
- Congenital/genetic aetiologies for secretory/osmotic diarrhoea in neonatal period/infancy
- Intestinal lymphatic/vascular malformations
- Malrotation

Conditions

- Congenital syndromes (e.g. Down syndrome, Hirschsprung disease, VATER)
- Gastroschisis-related
- Omphalocele-related

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

- Bowel cancer screening
- Classification of colonic polyps:
 - » neoplastic
 - » non-neoplastic
 - » sub-mucosal
- Current evidence-based colonic polyp surveillance recommendations
- Management and genetics of polyposis syndromes
- Structural pathologies and their intersections with surgeries
- Understand intestinal motility and motor physiology

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

- Anorectal physiology studies
- Indications and process of faecal transplantations
- Know indications for colonoscopies
- Quality assurance specific to colonoscopies
- Select appropriate radiology imaging (e.g. CT colonography, intestinal ultrasound)
- Stool testing types and indications (e.g. calpro, faecal occult blood test [FOBT], MCS, OCP [ova, cysts, parasites])
- Transit studies
- Understand appropriate endoscopic techniques

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.

PCH

- Genetic testing (e.g. TTC7A deficiency)

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Abnormal imaging (e.g. cirrhosis, liver lesions, portal hypertension)
- Abnormal liver function tests (LFTs)
- Ascites
- Bleeding varices:
 - » ectopic (e.g., stomal)
 - » gastric
 - » oesophageal
 - » rectal
- Bruising
- Cholangitis
- Encephalopathy
- Fever
- Jaundice
- Nausea/Vomiting
- Pain:
 - » abdominal
 - » right upper quadrant (RUQ)
- Pruritus
- Severe liver injury/liver failure (acute/chronic/acute on chronic)
- Weight loss

Conditions

- Abnormal LFT in previously well and unwell patients
- Acute hepatitis
- Alcoholic liver disease:
 - » alcoholic hepatitis
 - » chronic liver disease
- Autoimmune liver disease
- Biliary disease:
 - » autoimmune (e.g. primary biliary cholangitis, primary sclerosing cholangitis, IgG4 spectrum of diseases)
 - » infective (e.g. flukes)
- Cholestatic liver diseases
- Cirrhosis, including managing complications:
 - » acute on chronic
 - » chronic
- Cirrhotic and non-cirrhotic portal hypertension
- Complications of portal hypertension
- Drug-induced liver injury
- Hepatic failure:
 - » fulminant
 - » subfulminant

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

Synthesise

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

Manage

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

Consider other factors

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

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

	<ul style="list-style-type: none"> • Hepatic decompensation • Hepatocellular carcinoma (HCC) • Inherited and metabolic liver disease • Liver lesions: <ul style="list-style-type: none"> » benign » malignant • Metabolic disorders (e.g. haemochromatosis, Wilson disease) • Metabolic dysfunction-associated fatty liver disease (NAFLD/MAFLD) • Portal vein thrombosis • Pregnancy-related liver disease • Vascular liver disorders • Viral hepatitis 	
PCH	<p>Presentations</p> <ul style="list-style-type: none"> • Enlarged liver • Failure to thrive • Malnutrition <p>Conditions</p> <ul style="list-style-type: none"> • Alagille syndrome • Bile acid transport defects (e.g. progressive familial intrahepatic cholestasis defects) • Biliary atresia • Congenital metabolic disorders (fatty acid transport, glycogen storage diseases, glycosylation, mitochondrial defects) 	
<p>LESS COMMON OR MORE COMPLEX PRESENTATIONS AND CONDITIONS</p> <p>Advanced Trainees will understand these presentations and conditions.</p> <p>Advanced Trainees will understand the resources that should be used to help manage patients with these presentations and conditions.</p>	<p>Conditions</p> <ul style="list-style-type: none"> • Adults with lifelong congenital liver disease: <ul style="list-style-type: none"> » alpha 1 antitrypsin deficiency » biliary atresia » congenital hepatic fibrosis » cystic fibrosis liver disease » Fontan liver disease • Principles of management for post-liver transplant patients 	
PCH	<ul style="list-style-type: none"> • Metabolic disease requiring liver transplantation 	

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

- Pathophysiology:
 - » assessment and management of coagulation in cirrhosis
 - » gastrointestinal and hepatic complications of therapies (e.g. immune checkpoint inhibitors)
- Principles of oncology (e.g. cholangiocarcinoma, HCC)
- Public health matters (e.g. addiction and drug services, alcohol, obesity, viral hepatitis)

PCH

- Pathophysiology of other causes of cholestasis in the neonatal period and infancy (including bile acid transport disorders, causes of unconjugated jaundice e.g. Crigler–Najjar syndrome)

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.

- Appropriate liver imaging (contrast versus non-contrast CT and MRI)
- Know indications and risks for liver biopsy
- Know indications and risks for liver transplant, including who to, when, and how to refer
- Know indications and risks for transjugular intrahepatic portosystemic shunt (TIPSS)/direct intrahepatic portacaval shunt (DIPS)/balloon-occluded retrograde transvenous obliteration (BRTO)
- Liver fibrosis assessment, including non-invasive liver fibrosis tools
- Liver screening and surveillance for liver disease
- Portal hypertension assessment

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.

- Drug-induced liver injury (DILI)
- Inherited and metabolic liver diseases
- Pregnancy-related liver disease, including management of pre-existing liver disease in pregnancy

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Abnormal liver function tests (LFTs)
- Abdominal pain
- Diarrhoea
- Jaundice
- Pruritis

Conditions

- Autoimmune (e.g. IgG4 disease)
- Cholangiopathy
- Cholangitis
- Cholecystitis
- Congenital malformations of the bile ducts
- Disorders of bile metabolism
- Gallstone disease
- Hereditary pancreatitis
- Pancreatic/Biliary neoplasms (benign and malignant)
- Pancreatic insufficiency (see KG10)
- Pancreatitis (acute and chronic)
- Parasitic biliary disease

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Synthesise

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- » take a comprehensive clinical history
- » conduct an appropriate examination
- » establish a differential diagnosis
- » plan and arrange appropriate investigations
- » consider the impact of illness and disease on patients¹⁹ and their quality of life when developing a management plan

Manage

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

Consider other factors

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

PCH

- Extra hepatic biliary atresia
- Pancreatic insufficiency (cystic fibrosis and syndromic causes, e.g. Shwachman–Diamond syndrome)
- Primary sclerosing cholangitis

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

- Epidemiology and genetics of biliary disease
- Epidemiology and genetics of pancreatic disease

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- Effects of systemic disease leading to pancreatic dysfunction (e.g. cystic fibrosis, syndromic causes of exocrine pancreatic insufficiency)
- Principles of genetics in assessing acute and chronic pancreatitis in children

INVESTIGATIONS, PROCEDURES, AND CLINICAL ASSESSMENT TOOLS

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- Abnormal faecal testing and blood results (amylase and lipase, elastase, steatocrit, and other causes)
- Diagnostic imaging options:
 - » CT
 - » endoscopic retrograde cholangiopancreatography (ERCP)
 - » magnetic resonance cholangiopancreatography (MRCP)
- Endoscopic ultrasound scan (EUS):
 - » role of EUS-FNA for tissue diagnosis and prognosis
 - » role of therapeutic EUS (e.g. for pseudocyst obstruction)
- Malignant pancreatic pathology
- Role of genetics in diagnosing suspected disorders and syndromes (e.g. inherited causes of early onset cholestasis)
- Select and arrange appropriate investigations (ERCP, EUS, HIDA scan, liver biopsy, MRCP, SpyGlass, testing for recurrent acute pancreatitis [e.g. CFTR])
- Therapeutic options and indications:
 - » ERCP
 - » percutaneous transhepatic cholangiography (PTC)
 - » surgery
- Ultrasound

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.

- Genetic counselling
- Principles of prescribing pancreatic enzyme replacement therapy

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Abdominal pain
- Abnormal imaging (colon, fistula, thickened small bowel)
- Anaemia
- Diarrhoea
- Draining fistula
- Fever
- Malabsorption
- Nausea/Vomiting
- Raised inflammatory markers:
 - » blood
 - » faecal (faecal calprotectin)
- Rectal bleeding
- Weight loss

Conditions

- Crohn's disease
- Ulcerative colitis
- Indeterminate colitis

PCH

Presentations

- Failure to thrive

Conditions

- Very early onset (VEO) inflammatory bowel disease

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.

Conditions

- Conditions that mimic IBD (e.g. Behçet disease, chronic granulomatous disease)
- Lower gastrointestinal colitis (see KG4)
- Microscopic colitis

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

Synthesise

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- » take a comprehensive clinical history
- » conduct an appropriate examination
- » establish a differential diagnosis
- » plan and arrange appropriate investigations
- » consider the impact of illness and disease on patients²⁰ and their quality of life when developing a management plan

Manage

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

Consider other factors

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

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

Causes

- Awareness of the role of the colonic milieu (environment, genetics, microbiome)
- Dietary considerations, effects, and implications
- Environmental aspects (e.g. smoking)
- Genetic factors associated with IBD

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

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

Clinical/natural history

- Predictors of severity of disease, including age of presentation, smoking status, family history (i.e. genetic predisposition to IBD), nutritional status
- Recognise potential complications of disease and its management, and initiate preventative strategies (e.g., osteoporosis)

Therapeutics

- Genetics of thiopurine S-methyltransferase (TPMT), including interpretation of thiopurines metabolites
 - Understanding of small molecules and biologic therapy
-

INVESTIGATIONS, PROCEDURES, AND CLINICAL ASSESSMENT TOOLS

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

Clinical assessment tools

- Monitoring disease activity
- Monitoring response to therapy toxicities and strategies and options to alter therapy

Investigations

- Cancer screening
- Endoscopic evaluation
- Faecal microscopy and culture (e.g. Clostridium difficile toxin test, faecal calprotectin)
- Intestinal ultrasound
- Plan and arrange appropriate investigations, including capsule endoscopy, colonoscopy, gastroscopy, MRE, MRI rectum
- Radiological evaluation of disease and activity

Procedures

- Endoscopic intervention, including indications and options
 - Know indications for and when to involve a colorectal surgeon
 - Understanding of and indications for different surgical options
-

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.

- Conception counselling and pregnancy management
 - Genetic counselling
 - Management of chronic immunosuppression (e.g. bone health, skin checks, vaccination)
 - Nutritional management
 - Psychosocial and psychosexual impacts
 - Recognising and management of complications
 - Role of multidisciplinary assessment and care
 - Transition from paediatric to adult care
-

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Abdominal distention
- Abdominal pain
- Abnormal investigations/imaging
- Anaemia
- Change in bowel habit
- Constipation
- Diarrhoea
- Dysphagia
- Fever
- Gastrointestinal bleeding
- Jaundice
- Nausea/Vomiting
- Odynophagia
- Positive faecal occult blood test (FOBT)
- Reflux
- Weight loss

Conditions

- Genetic cancer syndromes affecting the gastrointestinal tract:
 - » nonpolyposis syndromes associated with bowel cancer (e.g. Lynch syndrome)
 - » polyposis syndromes
- Malignant neoplasms:
 - » cholangiocarcinoma
 - » colorectal
 - small bowel
 - » gallbladder
 - » gastric
 - » hepatocellular carcinoma (HCC)
 - » metastases to gastrointestinal organs
 - » oesophageal
 - » pancreatic
- Pre-malignant gastrointestinal lesions:
 - » Barrett's oesophagus, Intraductal Papillary Mucinous Neoplasm (IPMN), Gastric intestinal metaplasia (GIM), liver adenoma, polyps

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 patients²¹ 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

²¹ References to patients in the remainder of this document may include their families or carers.

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.

Conditions

- Other neoplasms:
 - » gastrointestinal stromal tumour (GIST)
 - » hepatoblastoma
 - » neuroendocrine tumours (NETs)
 - » small bowel tumours
- Malignancy mimics (e.g. IgG4 HOP mass, pseudo tumours)

PCH

- Other neoplasms (e.g. hepatoblastoma)

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

- Cancer immunology (e.g. biologics, immunotherapy)
- Genetics of gastrointestinal malignancy
- Malignancy associations (e.g. colon adenocarcinoma and primary sclerosing cholangitis)
- Principles of genetics and neoplasia development, including chronic inflammation

INVESTIGATIONS, PROCEDURES, AND CLINICAL ASSESSMENT TOOLS

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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.

- Cancer staging
- Endoscopic
- Imaging (e.g. EUS, PET)
- Interpretation of histopathology
- Know indications for:
 - » referral for liver transplantation
 - » surgery

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.

- Considering patient-specific management
 - Genetic counselling
 - Management of complications of cancer-related therapies
 - Role of multidisciplinary teams in cancer treatment, including appropriate team members for different cancer types
 - Role of palliative care, including endoscopic therapies
 - Role of referral for liver transplantation
 - Screening and surveillance
-

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Abdominal pain
- Bloating
- Chest pain
- Constipation
- Diarrhoea
- Dyspepsia
- Dysphagia
- Heartburn
- Nausea and vomiting
- Regurgitation

Conditions

- Biliary dyskinesia
- Cyclical vomiting syndrome
- Dyssynergic defaecation
- Functional chest pain
- Functional constipation
- Functional diarrhoea
- Functional dyspepsia
- Functional heartburn
- Gastroesophageal reflux disease
- Gastrointestinal manifestations of systemic disorders (e.g. hypermobility syndromes, neuropathic and myopathic disorders, scleroderma)
- Gastroparesis
- Irritable bowel syndrome
- Oesophageal motility disorders, including achalasia and oesophageal spasm
- Pharyngeal dysfunction
- Rumination syndrome

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 patients²² 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

PCH

Conditions

- Abdominal migraine
- Intestinal pseudo-obstruction
- Post-surgical pain and dysmotility (e.g. congenital conditions)

²² References to patients in the remainder of this document may include their families or carers.

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.

Conditions

- Centrally mediated abdominal pain Syndrome
- Chronic intestinal pseudo-obstruction
- Gastrointestinal manifestations of psychiatric disorders, including eating disorders and somatoform disorders
- Narcotic bowel syndrome

PCH

Conditions

- Trichobezoar/Bezoar

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

- Diet and lifestyle modifications
- Effects of psychological factors (e.g. early childhood trauma)
- Effects of the microbiome
- Epidemiology of disorders of gut–brain interaction (DGBI)
- Gut–brain axis
- Impact of systemic disease on gastrointestinal system, structure and function

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.

- Ambulatory oesophageal pH and impedance studies
- Anorectal manometry and pudendal nerve latency
- Anorectal physiology studies
- Oesophageal manometry
- Oesophageal transit, gastric emptying, small bowel transit, and colonic transit
- Role of surgical management (limited)

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.

- Eating disorders (see KG10)
- Education of patient (e.g. gut–brain axis)
- Medical therapies
- Multidisciplinary team approach (e.g. dietician involvement, pelvic floor physiotherapy, role of enteral feeding)
- Psychosocial considerations and their impact on diagnosis and management

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Disordered eating
- Food allergy or intolerance
- Malabsorption
- Malnutrition
- Obesity sarcopenia
- Specific nutrient deficiencies (e.g. iron deficiency, vitamin B12 deficiency, vitamin D deficiency)
- Weight loss

Conditions

- Cirrhosis
- Coeliac disease
- Consequences of bariatric surgery, including malabsorption and deficiencies
- Eating disorders
- Eosinophilic oesophagitis
- Food allergy
- Food intolerance (e.g. due to non-absorbed carbohydrates)
- Inflammatory bowel disease
- Intestinal failure
- Pancreatic insufficiency
- Protein losing enteropathies

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 and use appropriate validated screening tools
- » conduct an appropriate examination
- » establish a differential diagnosis
- » plan and arrange appropriate investigations
- » consider the impact of illness and disease on patients²³ 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 (e.g., registered dietitian, psychologist)

Consider other factors

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

PCH

Presentations

- Failure to thrive

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.

Conditions

- Short bowel syndrome

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EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

- Exclusion diet (e.g. gluten-free, high fibre, low fibre)
 - Impact of elective dietary restrictions (e.g. veganism, gluten and/or dairy-free) on nutritional status
 - Pathology of malabsorption syndromes (e.g. coeliac disease)
 - Understanding of clinical refeeding syndrome consequences
 - Understanding of local healthy eating guidelines
 - Understanding of nutrient requirements (e.g. calcium, energy, fibre, iron, protein)
 - Understanding of nutritional supplementation options (nutritional formulas, TPN)
 - Understanding of the psychological and pathological features of eating disorders, and awareness of validated screening tools (e.g. SCOFF questionnaire)
-

INVESTIGATIONS, PROCEDURES, AND CLINICAL ASSESSMENT TOOLS

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- Appropriate investigations:
 - » collateral history
 - » endoscopic
 - » laboratory
 - » physiological assessment
 - Multidisciplinary team approach to clinical assessment and management
 - Nutritional assessment
-

PCH

- Types, placement, and management of enteral feeding tubes
-

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.

- Be aware of disease-specific nutritional and dietary guidelines, and appropriate health professional and patient online resources
 - Consider the nutritional impact and associated risk factors of dietary changes
 - Ethical and legal considerations around nutritional support (i.e. provision and withdrawal of artificial supports)
 - Management of sepsis in patients with central access
 - Risk factors for, recognition, and management of refeeding syndrome
-

PCH

- In-hospital and home total parenteral nutrition (TPN)
-