Advanced Training Curricula Renewal

DRAFT Curriculum standards

Advanced Training in Sleep Medicine

(Adult Internal Medicine)

November 2023



About this document

This document outlines the curriculum standards for Advanced Training in Sleep Medicine (Adult Internal Medicine) for trainees and supervisors.

The curriculum standards should be used in conjunction with the Advanced Training in Sleep Medicine (Adult Internal Medicine) learning, teaching, and assessment programs.

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Contents

Program overview	
Purpose of Advanced Training	
Specialty overview	
Advanced Training curricula standards	5
Professional Practice Framework	6
Learning, teaching, and assessment structure	7
Curriculum standards	
Competencies	
Entrustable Professional Activities	
Knowledge Guides	50

Program overview

Purpose of Advanced Training

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

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

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



Specialty overview

Sleep Medicine incorporates the study of healthy sleep and the investigation and management of sleep disorders. Sleep Medicine is a non-organ specific, cross-disciplinary specialty. It is underpinned by a substantial and rapidly expanding scientific knowledge base. The maintenance of health across the ages is critically dependent on obtaining adequate sleep. Acute and chronic sleep deprivation is associated with a range of adverse neurobehavioral, endocrine, and cardiovascular outcomes.

Sleep Medicine specialists address the health care needs of the community by:

- Promoting healthy sleep and sleep practices across the lifespan
- Addressing and managing the burden of sleep disorders in a timely and cost-effective manner, utilising evidenced based approaches.
- Optimising sleep in the context of physical and mental health and co-morbid conditions.
- Providing information for industry and governmental regulatory authorities on the impact of sleep deprivation and sleep disorders.

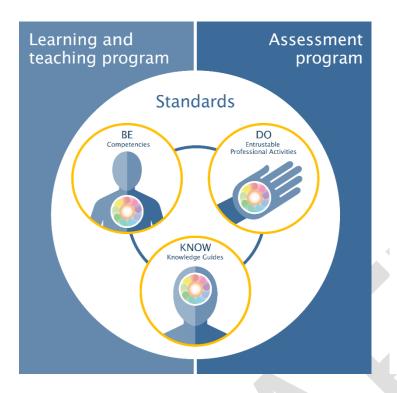
Sleep Medicine specialists possess special clinical skills such as:

- **Recognising how sleep affects health and daily functioning.** Sleep deprivation is endemic in western societies health implications include mood disturbance, accidents/injury, increased insulin resistance, and neuroendocrine disturbance.
- **Diagnosing, investigating, and managing individuals with sleep disorders.** Patients with sleep disorders undergo special assessment, which includes a combination of clinical evaluation and sleep monitoring and subsequent application of treatment modalities using various interventions, including medications, medical devices, surgical procedures, education, and behavioural techniques.
- Honing expertise in sleep monitoring and physiological assessment of sleep and sleep disorders.
- **Providing age-appropriate care.** Sleep disorders occur in a variety of patients, from children to the elderly. Effective treatments are available for most sleep disorders, but they rely on the accurate identification of the disorder and health professionals who are skilled in their application. Thus, sleep medicine physicians play a central role in delivery of health care to patients of all ages with primary and secondary sleep disorders.

Sleep Medicine specialists have specific professional skills including:

- **Applying a multidisciplinary approach.** Sleep medicine specialists work collaboratively with other health professionals and within a team.
- Working sensitively with a variety of patients. Sleep medicine specialists develop an ability to deal with patients from a diverse range of backgrounds, cognitive and physical function, in a professional and empathetic manner.
- **Strong communication skills.** Sleep medicine specialists must develop a personable interviewing technique and an ability to relate to patients from all walks of life. It is also essential that they appreciate when referral to a more appropriate or more qualified practitioner in a particular subspecialty is necessary.
- Managing resources for the benefit of patients and communities. Sleep medicine specialists 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.** Sleep medicine specialists conduct academic research to discover better ways of understanding, diagnosing, treating, and preventing disease. They apply research to improve the management of patients.

Advanced Training curricula standards



The **RACP curriculum model** is made up of curricula standards

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.



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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.

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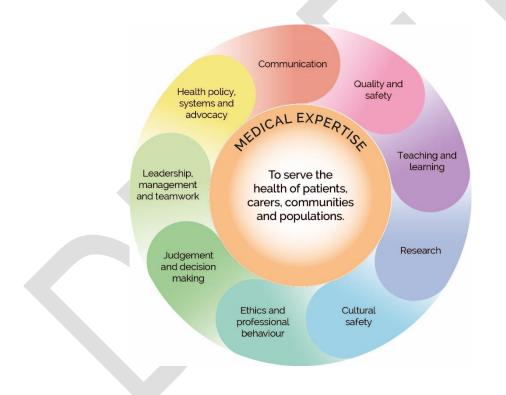
Common curricula standards

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

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

Professional Practice Framework

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



Learning, teaching, and assessment structure

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



Advanced Training learning, teaching, and assessment structure

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

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

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

Curriculum standards

Competencies

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

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

Competencies will be common across training programs.



Medical expertise

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

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

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

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

² References to patients in the remainder of this document may include their families and/or carers.

Communication



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

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

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

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

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

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

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



Quality and safety

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

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

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

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

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

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



Teaching and learning

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

Physicians foster the learning of others in their profession through a commitment to mentoring, supervising, and teaching².

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

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

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

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

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

Research

Professional standard: Physicians support creation, dissemination and translation of knowledge and practices applicable to health³ They do this by engaging with and critically appraising research, and applying it in policy and practice to improve the health outcomes of patients and populations.

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

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

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

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.

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

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

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

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

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

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

Ethics and professional behaviour



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

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

Physicians demonstrate high standards of personal behaviour.

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

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

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

Accountability: Be personally and socially accountable.

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

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

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

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

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

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

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

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

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

Judgement and decision making



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

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

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

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

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

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

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

Leadership, management, and teamwork



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

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

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

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

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

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

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



Health policy, systems, and advocacy

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

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

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

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

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

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

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

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

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

Entrustable Professional Activities



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

#	Theme	Title
1	Team leadership	Lead a team of health professionals
2	Supervision and teaching	Supervise and teach professional colleagues
3	Quality improvement	Identify and address failures in health care delivery
4	Clinical assessment and management	Clinically assess and manage the ongoing care of patients
5	Management of transitions in care	Manage transition of patient care between health professionals, providers, and contexts
6	Longitudinal care	Manage and coordinate longitudinal care of patients with chronic illness, disability, and/or long-term health issues
7	Communication with patients	Discuss diagnoses and management plans with patients
8	Prescribing	Prescribe therapies tailored to patients' needs and conditions
9	Investigations	Select, organise, and interpret investigations
10	Clinic management and procedures	Manage an outpatient clinic and plan, prepare for, perform, and provide aftercare for important practical procedures

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

EPA 1: Team leadership

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

	 acknowledge personal conflicts of interest and unconscious bias act collaboratively to resolve behavioural incidents and conflicts such as harassment and bullying demonstrate understanding of the negative impact of workplace conflict 	Ð
Judgement and decision making	 evaluate health services and clarify expectations to support systematic, transparent decision making make decisions when faced with multiple and conflicting perspectives ensure medical input to organisational decision making adopt a systematic approach to analysing information from a variety of specialties to make decisions that benefit health care delivery mate delivery monitor services and provide appropriate advice review new healthcare interventions and resources interpret appropriate data and evidence for decision making 	
Leadership, management, and teamwork	 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 understand the range of personal and other team members' skills, expertise, and roles acknowledge and respect the contribution of all health professionals involved in patients' care participate effectively and appropriately in multidisciplinary teams seek out and respect the perspectives of multidisciplinary team members when making decisions 	
Health policy, systems, and advocacy	 engage in appropriate consultation with stakeholders on the delivery of healthcare advocate for the resources and support for healthcare teams to achieve organisational priorities influence the development of organisational policies and procedures to optimise health outcomes identify the determinants of health of the population, and mitigate barriers to access to care remove self-interest from solutions to health advocacy issues 	nd

EPA 2: Supervision and teaching

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

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

		support learners to find forums to present research projects		
	Ś	encourage and guide learners to seek out relevant research to support practice		
		ole model a culturally appropriate approach to teaching	•	function effectively and respectfully when working with and teaching
	i	encourage learners to seek out opportunities to develop and mprove their own cultural competence		with people from different cultural backgrounds
Cultural safety		encourage learners to consider culturally appropriate care of Aboriginal and Torres Strait slander and Māori peoples into patients' management		
	I	consider cultural, ethical, and religious values and beliefs in reaching and learning		
		apply principles of ethical practice to teaching scenarios	•	demonstrate professional values, including commitment to
Ethics and professional	I	act as a role model to promote professional responsibility and		high-quality clinical standards, compassion, empathy, and respect
behaviour	• 1	ethics among learners respond appropriately to learners seeking professional guidance		provide learners with feedback to improve their experiences
	• •	prioritise workloads and manage	•	provide general advice and
	ł	earners with different levels of professional knowledge or experience	•	support to learners use health data logically and
	•	ink theory and practice when explaining professional decisions		effectively to investigate difficult diagnostic problems
	•	promote joint problem solving		
Judgement and decision making	t	support a learning environment hat allows for independent decision making		
	• (j	use sound and evidence-based udgement during assessments and when giving feedback to earners		
		escalate concerns about learners appropriately		
	6	maintain personal and learners' effective performance and continuing professional development	٠	demonstrate the principles and practice of professionalism and leadership in health care
Leadership, management, and teamwork	• 1	naintain professional, clinical, research, and/or administrative	•	participate in mentor programs, career advice, and general counselling
	ا • (responsibilities while teaching create an inclusive environment whereby the learner feels part of		č
	t	the team help shape organisational culture		
	t	o prioritise quality and work safety hrough openness, honesty,		

		shared learning, and continued improvement		
Health policy, systems, and advocacy	٠	advocate for suitable resources to provide quality supervision and maintain training standards	٠	incompletely integrate public health principals into teaching and practice
	٠	explain the value of health data in the care of patients or populations		
	٠	support innovation in teaching and training		

EPA 3: Quality improvement

Theme	Quality improvement	AT-EPA-03
Title	Identify and address failures in health	n care delivery
Description	 This activity requires the ability to: identify and report actual and potent conduct and evaluate system improve adhere to best practice guidelines audit clinical guidelines and outcome contribute to the development of pol patients and enhance healthcare monitor one's own practice and development 	vement activities es licies and protocols designed to protect
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	 regularly review patients' or 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 and ensure that it aligns with current evidence and best practice guidelines 	 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	 support patients to have access to, and use, easy-to-understand, high-quality information about health care support patients to share decision making about their own health care, to the extent they choose assist patients' access to their health information, as well as complaint and feedback systems discuss with patients any safety and quality concerns they have 	 demonstrate awareness of the evidence for consumer engagement and its contribution to quality improvement in healthcare apply knowledge of how health literacy might affect the way patients or populations gain access to, understand, and use health information
	 relating to their care implement the organisation's open disclosure policy 	

Quality and safety	 demonstrate safety skills, including infection control, adverse event reporting, and effective clinical handover participate in organisational quality and safety activities, including morbidity and mortality reviews, clinical incident reviews, root cause analyses, and corrective action preventative action plans participate in systems for surveillance and monitoring of adverse events and 'near misses', including reporting such events use clinical audits and registries of data on patients' experiences and outcomes, learnings from incidents, and complaints to improve healthcare 	 demonstrate understanding of a systematic approach to improving the quality and safety of healthcare
	 translate quality improvement approaches and methods into practice 	 work within organisational quality and safety systems for the delivery of clinical care
Teaching and learning	 participate in professional training in quality and safety to ensure a contemporary approach to safety system strategies 	 use opportunities to learn about safety and quality theory and systems
	 supervise and manage the performance of junior colleagues in the delivery of high-quality, safe care 	
Research	• 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	 understand that patient participation in research is voluntary and based on an appropriate understanding about the purpose, methods, demands, risks, and potential benefits of the research
Cultural safety	 undertake professional development opportunities that address the impact of cultural bias on health outcomes 	 communicate effectively with patients from culturally and linguistically diverse backgrounds
Ethics and professional behaviour	 contribute to developing an organisational culture that enables and prioritises patients' safety and quality 	 comply with professional regulatory requirements and codes of conduct
Judgement and decision making	 use decision-making support tools, such as guidelines, protocols, pathways, and reminders analyse and evaluate current care processes to improve healthcare 	 access information and advice from other health practitioners to identify, evaluate, and improve patients' care management
Leadership, management, and teamwork	 support multidisciplinary team activities to lower patients' risk of harm, and promote interdisciplinary programs of education 	 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

	 actively involve clinical pharmacists in the medication-use process
Health policy, systems, and advocacy	 support the development, implementation, evaluation, and monitoring of governance processes measure, analyse, and report a set of specialty-specific process of care and outcome clinical indicators, and a set of generic safety indicators take part in the design and implementation of the organisational systems for: defining the scope of clinical practice performance monitoring and management clinical, and safety and quality education and training maintain a dialogue with service managers about issues that affect patient care contribute to relevant organisational policies and procedures help shape an organisational culture that prioritises safety and quality through openness, honesty learning, and quality improvement

Theme	Clinical assessment and management	AT-EPA-04	
Title	Clinically assess and manage the ongoing care of patients		
Description	 This activity requires the ability to: identify and access sources of relevant obtain patient histories examine patients synthesise findings to develop provision discuss findings with patients, families generate a management plan present findings to other health profestion 	onal and differential diagnoses s and/or carers	
Behaviours			
<u>Professional</u> <u>practice</u> <u>framework</u> domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision The trainee will:	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity The trainee may:	
Medical expertise	 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 develop management plans based on relevant guidelines, and consider the balance of benefit and harm by taking patients' medical comorbidities and personal set of circumstances into 	 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 	
Communication	take patients' concerns seriously, giving them adequate opportunity	 anticipate, read, and respond to verbal and non-verbal cues demonstrate active listening skills communicate patients' situations to colleagues, including senior clinicians 	

EPA 4: Clinical assessment and management

	 communicate clearly, effectively, respectfully, and promptly with other health professionals involved in patients' care
Quality and safety	 demonstrate safety skills, including infection control, adverse event reporting and effective clinical handover recognise and effectively deal with aggressive and violent patient behaviours through appropriate training obtain informed consent before undertaking any investigation or providing treatment (except in an emergency) ensure patients are informed of the material risks associated with any part of proposed management plans demonstrate safety skills, including infection control precautions at appropriate moments take precaution against assaults from confused or agitated patients, ensuring appropriate care of patients document history and physical examination findings, and synthesise with clarity and completeness
Teaching and learning	 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 set unclear goals and objectives for self-learning set unclear goals and objectives for self-learning self-reflect infrequently deliver teaching considering learners' level of training
Research	 search for, find, compile, analyse, interpret, and evaluate information relevant to the research subject refer to guidelines and medical literature to assist in clinical assessments when required demonstrate an understanding of the limitations of evidence and the challenges of applying research in daily practice
Cultural safety	 acknowledge patient's beliefs and values, and how these might impact on health demonstrate effective and culturally competent communication and care for Aboriginal and Torres Strait Islander and Māori peoples, and members of other cultural groups use a professional interpreter, health advocate, or a family or communication with patients use plain-language patient education materials, and demonstrate cultural and linguistical sensitivity acknowledge patient's beliefs and values, and how these might impact on health display respect for patients' cultures, and attentiveness to social determinants of health display an understanding of at least the most prevalent cultures in society, and an appreciation of their sensitivities appropriately access interpretive or culturally focused services

Ethics and professional behaviour	 demonstrate professional values, including compassion, empathy, respect for diversity, integrity, honesty, and partnership to all patients hold information about patients in confidence, unless the release of information is required by law or public interest assess patients' capacity for decision making, involving a proxy decision maker appropriately 	 demonstrate professional conduct, honesty, and integrity consider patients' decision-making capacity identify patients' preferences regarding management and the role of families in decision making not advance personal interest or professional agendas at the expense of patient or social welfare
Judgement and decision making	 apply knowledge and experience to identify patients' problems, making logical, rational decisions, and acting to achieve positive outcomes for patients adopt a holistic approach to patient care, considering patient preferences, comorbidity, uncertainty and risk. use the best available evidence for the most effective therapies and interventions to ensure quality care 	 demonstrate clinical reasoning by gathering focused information relevant to patients' care recognise personal limitations and seek help in an appropriate way when required
Leadership, management, and teamwork	 work effectively as a member of multidisciplinary teams to achieve the best health outcome for patients present and discuss complicated cases within a multidisciplinary team (MDT) to help direct clinical management demonstrate awareness of colleagues in difficulty, and work within the appropriate structural systems to support them while maintaining patient safety 	• share relevant information with members of the health care team
Health policy, systems, and advocacy	 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 	 identify and navigate components of the healthcare system relevant to patients' care identify and access relevant community resources to support patient care

EPA 5: Management of transitions in care

Theme	Management of transitions in care	AT-EPA-05
Title	Manage the transition of patient care providers, and contexts	between health professionals,
Description	for escalation of care recognise and manage acutely unwe	providers and other stakeholders ion propriate, and relevant patient ngs (appropriate to the speciality), critical care situations. respond by following the local process ell patients who require resuscitation equipment or prescribing permits where
Behaviours		
<u>Professional</u> <u>practice</u> <u>framework</u> 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	 facilitate an optimal transition of care for patients identify and manage key risks for patients during transition anticipate possible changes in patients' conditions, and provide recommendations on how to manage them identify (where appropriate) current ventilation devices and the machine settings, and hand over relevant information regarding ventilation devices including funding source, requirement for machine servicing or replacement. recognise immediate life-threatening conditions and deteriorating and critically unwell patients, and respond appropriately perform advanced life support, according to resuscitation council guidelines, to a high level of advanced resuscitation skills 	 understand the details of patients' conditions, illness severity, and potential emerging issues with appropriate actions provide accurate summaries of patients' information with accurate identification of problems or issues recognise seriously unwell patients requiring immediate care apply basic life support as indicated
Communication	 write relevant and detailed medical record entries, including clinical assessments and management plans 	 communicate clearly with clinicians and other caregivers use standardised verbal and written templates to improve the

Advanced Training Curriculum Standards Sleep Medicine (Adult Internal Medicine) consultation draft, November 2023

	 write comprehensive and accurate summaries of care, including discharge summaries, clinic letters, and transfer documentation initiate and maintain verbal communication with other health professionals, when required communicate with patients, families and/or carers about transition of care, and engage and support these parties in decision making 	 reliability of information transfer and prevent errors and omissions communicate accurately and in a timely manner to ensure an effective transition between settings, and continuity and quality of care determine the patients' understanding of their diseases and what they perceive as the most desirable goals of care
	 identify patients at risk of a poor transition of care, and mitigate this risk use electronic tools (where available) to securely store and 	 ensure that handover is complete, or work to mitigate risks if the handover was incomplete ensure all outstanding results or procedures are followed up by
Quality and safety	 available) to securely store and transfer patient information use consent processes, including written consent if required, for the release and exchange of information 	 keep patients' information secure, adhering to relevant legislation regarding personal information and privacy
	 demonstrate understanding the medicolegal context of written communications maintain up-to-date certification in advanced life support 	 raise appropriate issues for review at morbidity and mortality meetings
Teaching and learning	 integrate clinical education in handover sessions and other transition of care meetings tailor clinical education to the level of the professional parties involved 	• take opportunities to teach junior colleagues during handover, as necessary
	• communicate with careful consideration to health literacy, language barriers, and culture about patient preferences, and whether they are realistic and possible, respecting patient choices	 include relevant information regarding patients' cultural or ethnic background in handovers, and whether an interpreter is required
Cultural safety	 recognise the timing, location, privacy, and appropriateness of sharing information with patients and their families or carers 	
	 negotiate health care decisions in a culturally appropriate way by considering variation in family structures, cultures, religion, or belief systems 	
Ethics and professional behaviour	 disclose and share only contextually appropriate medical and personal information demonstrate understanding of the clinical, ethical, and legal rationale for information disclosure 	 maintain respect for patients, families, carers, and other health professionals, including respecting privacy and confidentiality
	 share information about patients' 	

	with privacy law and professional guidelines on confidentiality	
	 demonstrate understanding of the additional complexity related to some types of information, such as genetic information and blood-borne-virus status, and seek appropriate advice about disclosure of such information 	
	 interacts in a collegiate and collaborative way with professional colleagues during transitions of care 	
Judgement and	 ensure patients' care is in the most appropriate facility, setting, or provider 	 use a structured approach to consider and prioritise patients' issues
decision making	 recognise the need for escalation of care, and escalate to appropriate staff or services 	 recognise personal limitations and seek help in an appropriate way when required
	 share the workload of transitions of care appropriately, including delegation 	 recognise factors that impact on the transfer of care, and help subsequent health professionals
Leadership, management, and teamwork	 demonstrate understanding of the medical governance of patient care, and the differing roles of team members 	 to understand the issues to continue care work to overcome the potential barriers to continuity of care,
	 show respect for the roles and expertise of other health professionals, and work effectively as a member of professional teams 	appreciating the role of handover in overcoming these barriers
	 ensure that multidisciplinary teams provide the opportunity for patients' engagement and participation when appropriate 	
	 contribute to processes for managing risks, and identify strategies for improvement in transition of care 	 factor transport issues and costs to patients into arrangements for transferring patients to other settings
Health policy, systems, and advocacy	 engage in organisational processes to improve transitions of care, such as formal surveys or follow-up phone calls after hospital discharge 	 understand the systems for the escalation of care for deteriorating patients
	 collaborate with emergency medicine staff and other colleagues to develop policies and protocols for the investigation and management of common acute medical problems 	

EPA 6: Longitudinal care

Theme	Longitudinal care	AT-EPA-07
Title	Manage and coordinate the longitudir illness, disability, and/or long-term he	
Description	This activity requires the ability to:	
	 develop management plans and goa carers, and/or families 	als in consultation with patients,
	 manage chronic and advanced conc and comorbidities 	litions, complications, disabilities,
	collaborate with other health care pr	oviders
	 ensure continuity of care 	
	 facilitate patients' and/or families' an and self-monitoring 	nd/or carers' self-management
	engage with the broader health police	cy context.
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:
	 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 	 assess patients' knowledge, beliefs, concerns, and daily behaviours related to their chronic condition and/or disability and its management
Medical expertise	• provide documentation on patients' presentation, management, and progress, including key points of diagnosis and decision making to inform coordination of care	 contribute to medical record entries on the history, examination, and management plan in a way that is accurate and sufficient as a member of multidisciplinary
	 ensure patients contribute to their needs assessments and care planning 	teams
	 monitor treatment outcomes, effectiveness, and adverse events 	
	 encourage patients' self-management through education to take greater responsibility for their care, and support problem solving 	 provide healthy lifestyle advice and information to patients on the importance of self-management work in partnership with patients, and motivate them to comply with
Communication encourage patients' access	 encourage patients' access to self-monitoring devices and 	agreed care plans
	 communicate with multidisciplinary team members, and involve patients in that dialogue 	
Quality and safety	 use innovative models of chronic disease care using telehealth and digitally integrated support services 	 participate in continuous quality improvement processes and clinical audits on chronic disease management

	•	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	•	identify activities that may improve patients' quality of life
	•	become more independent participate in quality improvement processes impacting on patients' abilities to undertake normal activities of daily living		
Teaching	٠	contribute to the development of clinical pathways for chronic diseases management based on current clinical guidelines	٠	use clinical practice guidelines for chronic diseases management
and learning	٠	educate patients to recognise and monitor their symptoms, and undertake strategies to assist their recovery		
Research	٠	prepare reviews of literature on patients' encounters to present at journal club meetings	•	search literature using Problem/Intervention/Comparison/ Outcome (PICO) format
	•	search for and critically appraise evidence to resolve clinical areas of uncertainty	•	recognise appropriate use of review articles
Cultural safety	•	encourage patients from culturally and linguistically diverse backgrounds to join local networks to receive the support needed for long-term self-management	•	provide culturally safe chronic disease management
	•	share information about patients' health care, consistent with privacy laws and confidentiality and professional guidelines	•	share information between relevant service providers acknowledge and respect the contribution of health professionals
Ethics and professional behaviour		use consent processes for the release and exchange of health information		involved in patients' care
	•	assess patients' decision-making capacity, and appropriately identify and use alternative decision makers		
Judgement and	•	implement stepped care pathways in the management of chronic diseases and disabilities	٠	recognise personal limitations and seek help in an appropriate way when required
decision making	•	recognise patients' needs in terms of both internal resources and external support on a long-term health care journey		
Leadership,	٠	coordinate whole-person care through involvement in all stages of the patients' care journey	٠	participate in multidisciplinary care for patients with chronic diseases and disabilities, including
management, and teamwork	•	use a multidisciplinary approach across services to manage patients with chronic diseases and disabilities		organisational and community care on a continuing basis, appropriate to patients' context

	 develop collaborative relationships with patients, families, carers, and a range of health professionals
	 use health screening for early intervention and chronic diseases management demonstrate awareness of government initiatives and service available for patients with chronic
	 assess alternative models of healthcare delivery to patients with chronic diseases and disabilities diseases and disabilities, and display knowledge of how to access them
Health policy, systems, and advocacy	 participate in government initiatives for chronic diseases management to reduce hospital admissions and improve patients' quality of life
	 help patients access initiatives and services for patients with chronic diseases and disabilities

EPA 7: Communication with patients

Theme	Communication with patients	AT-EPA-08	
Title	Discuss diagnoses and management plans with patients		
Description	 This activity requires the ability to: select a suitable context and include team members adopt a patient-centred perspective, and disabilities select and use appropriate modalitie structure conversations intentionally negotiate a mutually agreed manage verify patient, family or carer unders develop and implement a plan for er ensure the conversation is documer 	, including adjusting for cognition es and communication strategies ement plan standing of information conveyed nsuring actions occur	
Behaviours			
<u>Professional</u> <u>practice</u> <u>framework</u> 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	 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 plan management in partnership with them provide information to patients to enable them to make informed decisions about diagnostic, therapeutic, and management options recognise when to refer patients to psychological support services 	 apply knowledge of the scientific basis of health and disease to the management of patients demonstrate an understanding of the clinical problem being discussed formulate management plans in partnership with patients 	
Communication	 use an appropriate communication strategy and modalities for communication, such as emails, face-to-face, or phone calls elicit patients' views, concerns, and preferences, promoting rapport 	 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, 	

	 provide information to patients in plain language, avoiding jargon, acronyms, and complex medical terms 	 developmental level, and cognitive, physical, cultural, socioeconomic, and situational factors collaborate with patient liaison
	 encourage questions, and answer them thoroughly 	officers as required
	 ask patients to share their thoughts or explain their management plan in their own words, to verify understanding 	
	 convey information considerately and sensitively to patients, seeking 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 	
	 discuss with patients their condition and the available management options, including potential benefits and harms 	 inform patients of the material risks associated with the proposed management plan treat information about patients
	 provide information to patients in a way they can understand before asking for their consent 	as confidential
Quality and safety	 consider young people's capacity for decision making and consent 	
	• recognise and take precautions where patients may be vulnerable, such as issues of child protection, self-harm, or elder abuse	
	participate in processes to manage patient complaints	
Teaching	 discuss the aetiology of diseases and explain the purpose, nature, and extent of the assessments to be conducted 	 respond appropriately to informatio sourced by patients, and to patients knowledge regarding their condition
and learning	 obtain informed consent or other valid authority before involving patients in teaching 	
	 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 	 refer to evidence-based clinical guidelines demonstrate an understanding of the limitations of the evidence and the challenges of applying
Research	 provide information to patients in a way they can understand before asking for their consent to participate in research 	research in daily practice
	 obtain an informed consent or other valid authority before involving patients in research 	

Cultural safety	 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 	 identify when to use interpreters allow enough time for communication across linguistic and cultural barriers
	 use qualified language interpreters or cultural interpreters to help meet patients' communication needs provide plain language and 	
	culturally appropriate written materials to patients when possible	
	 encourage and support patients to be well informed about their health, and to use this information wisely when they make decisions 	 respect the preferences of patients communicate appropriately, consistent with the context, and respect patients' needs
	 encourage and support patients and, when relevant, their families or carers, in caring for themselves and managing their health 	 and preferences maximise patient autonomy, and support their decision making
	and managing their healthdemonstrate respectful professional relationships	 avoid sexual, intimate, and/or financial relationships with patients demonstrate a caring attitude
Ethics and professional behaviour	 with patients prioritise honesty, patients' welfare, and community benefit 	 towards patients respect patients, including protecting their rights to privacy and
	 above self-interest develop a high standard of personal conduct, consistent with professional and community expectations 	 behave equitably towards all, irrespective of gender, age, culture, socioeconomic status, sexual preferences, beliefs, contribution
	 support patients' rights to seek second opinions 	to society, illness-related behaviours or the illness itself
		 use social media ethically and according to legal obligations to protect patients' confidentiality and privacy
	 communicate effectively with team members involved in patients' care, and with patients, families 	 answer questions from team members
Leadership, management, and teamwork	and carersdiscuss medical assessments,	 summarise, clarify, and communicate responsibilities of healthcare team members
	treatment plans, and investigations with patients and primary care teams, working collaboratively with all	 keep healthcare team members focused on patient outcomes
	 discuss patient care needs with healthcare team members to align them with the appropriate resources 	
	 facilitate an environment where all team members feel they can 	

	contribute and their opinion is valued	
	 communicate accurately and succinctly, and motivate others on the healthcare team 	
Health policy, systems, and advocacy	 collaborate with other services, such as community health centre and consumer organisations, to help patients navigate the healthcare system 	 communicate with and involve other health professionals as appropriate

EPA 8: Prescribing

Theme	Prescribing	AT-EPA-09
Title	Prescribe therapies tailored to patien	ts' needs and conditions
Description	 taking into consideration age, comorrisks, and benefits communicate with patients and famiand risks of proposed therapies provide instructions on medication a monitor medicines for efficacy and s review medicines and interactions, a collaborate with pharmacists 	d on an understanding of pharmacology, rbidities, potential drug interactions, lies or carers about the benefits dministration effects and side effects afety and cease where appropriate for prescribing particularly for schedule 8
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	 identify the patients' disorders requiring pharmacotherapy consider non-pharmacologic therapies consider age, chronic disease status, lifestyle factors, allergies, potential drug interactions, and patient preference prior to prescribing a new medication plan for follow-up and monitoring demonstrate awareness of different formulations of common medications, and consider appropriate formulation and/or strength recognise the impacts of age and metabolism on the absorption, distribution, and excretion of medicines 	 be aware of potential side-effects and practical prescription points, such as medication compatibility and monitoring in response to therapies select medicines for common conditions appropriately, safely, and accurately demonstrate understanding of the rationale, risks, benefits, side effects, contraindications, dosage, and drug interactions identify and manage adverse events
Communication	 discuss and evaluate the risks, benefits, and rationale of treatment options, making decisions in partnership with patients write clear and legible prescriptions in plain language, and include specific indications for the anticipated duration of therapy 	 discuss and explain the rationale for treatment options with patients, families or carers explain the benefits and burdens of therapies, considering patients' individual circumstances write clearly legible scripts or charts using generic names of the required medication in full,

	 educate patients about the intended use, expected outcomes, and potential side effects for each prescribed medication, addressing the common, rare, and serious effects at the time of prescribing to improve patients' adherence to pharmacotherapy 	 including mg/kg/dose information and all legally required information seek further advice from experienced clinicians or pharmacists when appropriate
	 describe how the medication should and should not be administered, including any important relationships to food, time of day, and other medicines being taken 	
	 ensure patients' understanding by repeating back pertinent information, such as when to return for monitoring and whether therapy continues after this single prescription 	
	 identify patients' concerns and expectations, and explain how medicines might affect their everyday lives 	
	 review medicines regularly to reduce non-adherence, and monitor treatment effectiveness, possible side effects, and drug interactions, ceasing unnecessary medicines 	 check the dose before prescribing monitor side effects of medicines prescribed identify medication errors and institute appropriate measures
	• use electronic prescribing tools where available, and access electronic drug references to prevent errors caused by drug interactions and poor handwriting	 use electronic prescribing systems safely rationalise medicines to avoid polypharmacy
Quality and safety	 prescribe new medicines only when they have been demonstrated to be safer or more effective at improving patient-oriented outcomes than existing medicines 	
	 participate in clinical audits to improve prescribing behaviour, including an approach to polypharmacy and prescribing cascade 	
	 report suspected adverse events to the Advisory Committee on Medicines, and record it in patients' medical records 	
	 use continuously updated software for computers and electronic prescribing programs 	 undertake continuing professional development to maintain currency with prescribing guidelines
Teaching and learning	 ensure patients understand management plans, including adherence issues 	 reflect on prescribing, and seek feedback from a supervisor
	 use appropriate guidelines and evidence-based medicine 	

	resources to maintain a working knowledge of current medicines, keeping up to date on new medicines	
Research	 critically appraise research material to ensure any new medicine improves patient-oriented outcomes more than older medicines, and not just more than placebo use sources of independent information about medicines that provide accurate summaries of the available evidence on new medicines 	 make therapeutic decisions according to the best evidence recognise where evidence is limited, compromised, or subject to bias or conflict of interest
Cultural safety	 explore patients' understanding of and preferences for non-pharmacological and pharmacological management offer patients effective choices based on their expectations of treatment, health beliefs, and cost interpret and explain information to patients at the appropriate level of their health literacy anticipate queries to help enhance the likelihood of medicines being taken as advised ensure appropriate information is available at all steps of the medicine management pathway 	 appreciate patients' cultural and religious backgrounds, attitudes, and beliefs, and how these might influence the acceptability of pharmacological and non-pharmacological management approaches
Ethics and professional behaviour	 provide information to patients about: what the medicine is for what it does potential side effects how to take it when it should be stopped make prescribing decisions based on good safety data when the benefits outweigh the risks involved demonstrate understanding of the ethical implications of pharmaceutical industry-funded research and marketing 	 consider the efficacy of medicines in treating illnesses, including the relative merits of different non-pharmacological and pharmacological approaches follow regulatory and legal requirements and limitations regarding prescribing follow organisational policies regarding pharmaceutical representative visits and drug marketing
Judgement and decision making	 use a systematic approach to select treatment options use medicines safely and effectively to get the best possible results choose suitable medicines only if medicines are considered necessary and will benefit patients prescribe medicines appropriately to patients' clinical needs, in doses that meet their individual 	 recognise personal limitations and seek help in an appropriate way when required consider the following factors for all medicines: contraindications cost to patients, families, and the community funding and regulatory considerations generic versus brand medicines

	requirements, for a sufficient length of time, with the lowest cost to them	» interactions» risk-benefit analysis
	 evaluate new medicines in relation to their possible efficacy and safety profile for individual patients 	
	 interact with medical, pharmacy, and nursing staff to ensure safe 	 work collaboratively with pharmacists
Leadership, management, and teamwork	 and effective medicine use work collaboratively in a multi- disciplined team for non- pharmacologic treatments for sleep disorders 	 participate in medication safety and morbidity and mortality meetings
Health policy, systems, and advocacy	 choose medicines in relation to comparative efficacy, safety, and cost-effectiveness against medicines already on the market 	 prescribe in accordance with the organisational policy
	 prescribe for individual patients, considering history, current medicines, allergies, and preferences, ensuring that healthcare resources are used wisely for the benefit of patients 	
	 prescribe in compliance with state and federal legislation particularly with regards to schedule 8 medications and schedule 4 drugs of dependence 	

EPA 9: Investigations

Theme	Investigations	AT-EPA-11
Title	Select, organise, and interpret invest	tigations
Description	 prioritise patients receiving investigation evaluate the anticipated value of the 	e investigation ad their families or carers to facilitate eded) of investigations
Behaviours		
<u>Professional</u> <u>practice</u> <u>framework</u> Domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision The trainee will:	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity The trainee may:
Medical expertise	 choose evidence-based investigations and frame them as an adjunct to comprehensive clinical assessments assess patients' concerns, and determine the need for specific tests that are likely to result in overall benefit develop plans for investigations, identifying their roles and timing recognise and correctly interpret abnormal findings, considering patients' specific circumstances, and act accordingly 	 provide rationale for investigations understand the significance of abnormal test results and act on these consider patient factors and comorbidities consider age-specific reference ranges
Communication	 explain to patients the potential benefits, risks, costs, burdens, and side effects of each option, including the option to have no investigations use clear and simple language, and check that patients understand the terms used and agree to proceed with proposed investigations identify patients' concerns and expectations, providing adequate explanations on the rationale for individual test ordering confirm whether patients have understood the information they have been given and the need for more information before deciding 	 discuss the indications, risks, benefits, and complications of investigations with patients before ordering investigations explain the results of investigations to patients arrange investigations, providing accurate and informative referrals, and liaise with other services where appropriate

	 use written or visual material 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 	
	identify adverse outcomes that	 consider safety aspects of
Quality and safety	may result from a proposed investigation, focusing on patients' individual situations	 investigations when planning them seek help with interpretation of test results for less common tests or
anu salety	 ensure quality control of the investigations performed are up to current standards 	indications or unexpected results
Teaching	 use appropriate guidelines, evidence sources, and decision support tools 	 undertake professional development to maintain currency with investigation guidelines
and learning	 participate in clinical audits to improve test ordering strategies for diagnoses and screening 	
Research	 provide patients with relevant information if a proposed investigation is part of a research program obtain written consent from patients if the investigation 	 refer to evidence-based clinical guidelines consult current research on investigations
	is part of a research program	e consider notionte' cultural and
Cultural safety	 understand patients' views and preferences about any proposed investigation and the adverse outcomes they are most concerned about 	 consider patients' cultural and religious backgrounds, attitudes, and beliefs, and how these might influence the acceptability of proposed investigations
	 practice within the scope of the authority given by patients (with the exception of emergencies) discuss with patients how decisions will be made once the investigation has started and the patient is not able to participate in decision making 	 identify appropriate proxy decision makers when required choose not to investigate in situations where it is not appropriate for ethical reasons practise within current ethical and professional frameworks
Ethics and professional behaviour	 respect patients' decisions to refuse investigations, even if their decisions may not be appropriate or evidence based 	 practise within own limits, and seek help when needed involve patients in decision making regarding investigations, obtaining the appropriate informed approact.
	 advise patients there may be additional costs, which patients may wish to clarify before proceeding 	the appropriate informed consent, including financial consent, if necessary
	 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 information obtained from investigations, and subsequent disclosure of such information
Judgement and decision making	 evaluate the costs, benefits, and potential risks of each investigation in a clinical situation adjust the investigative path depending on test results received consider whether patients' conditions may get worse or better if no tests are selected choose the most appropriate investigation for the clinical scenario in discussion with patients recognise personal limitations and seek help in an appropriate way when required
Leadership, management, and teamwork	 consider the role other members of the healthcare team might play, and what other sources of information and support are available demonstrate understanding of what parts of an investigation are provided by different doctors or health professionals
	 ensure results are checked in a timely manner, taking responsibility for following up results
Health policy, systems, and advocacy	 select and justify investigations regarding the pathological basis of disease, appropriateness, utility, safety, and cost effectiveness
	consider resource utilisation through peer review of testing behaviours

Title Manage an outpatient clinic and plan, prepare for, perform, and provide aftercare for important practical procedures **Description** This activity requires the ability to: manage medical procedures and treatments • ensure appropriate procedures are selected in partnership with patients, their families or carers obtain informed consent manage clinic services oversee quality improvement activities communicate with patients, their families and/or carers liaise with other health professionals and team members demonstrate problem-solving skills responsibly use public resources. **Behaviours** Ready to perform Requires some supervision without supervision **Professional** Possible behaviours of a trainee Expected behaviours of a trainee who practice who needs some supervision can routinely perform this activity framework to perform this activity without needing supervision domain The trainee will: The trainee may: demonstrate understanding • effectively identify and address of the importance of prevention, current clinical concerns, as well early detection, health as longer-term clinical objectives, maintenance, and chronic as appropriate to patients' context condition management evaluate environmental and assess patients and identify lifestyle health risks, and advocate • indications for healthy lifestyle choices for procedures create an accurate and perform a range of common appropriately prioritised problem Medical procedures list in the clinical notes or as part expertise of an ambulatory care review check for allergies and adverse reactions update documentation in a time frame appropriate to the clinical consider risks and complications of situation of patients procedures select procedures by assessing patient-specific factors, risks, benefits, and alternatives confidently and consistently perform a range of common procedures help patients navigate the wherever practical, meet patients' specific language and healthcare system to improve

EPA 10: Clinic management and procedures

Clinic management

Theme

•

Communication

access to care by collaboration

community health centres and

community-based health programs and group education programs

with other services, such as

consumer organisations

link patients to specific

communication needs

materials

facilitate appropriate use of

interpreter services and translated

AT-EPA-12

	 accurately document procedures in clinical notes, including inform consent, procedures requested and performed, reasons for procedures, medicines given, aseptic technique, and aftercare explain procedures clearly to patients, families or carers, including reasons for procedures potential alternatives, and possib risks, to facilitate informed choice 	ed S, ble
	 practice health care that maximises patient safety 	 take reasonable steps to address issues if patients' safety may be compromised
Quality and safety	 adopt a systematic approach to the review and improvement of professional practice in the outpatient clinic setting 	 understand a systematic approach to improving the quality and safety of health care
and Safety	 identify aspects of service provision that may be a risk to patients' safety 	 participate in organisational quality and safety activities, including clinical incident reviews
	ensure that patients are informed about fees and charges	d
	evaluate their own professional practice	 recognise the limits of personal expertise, and involve other
	• demonstrate learning behaviour and skills in educating junior	professionals as needed to contribute to patients' care
	colleaguescontribute to the generation of knowledge	 use information technology appropriately as a resource for modern medical practice
Teaching and learning	 maintain professional continuing education standards 	 participate in continued professional development
	• refer to and/or be familiar with relevant published procedural guidelines prior to undertaking procedures	
	organise or participate in in-serv training on new technology	ice
	 obtain informed consent or other valid authority before involving patients in research 	 allow patients to make informed and voluntary decisions to participate in research
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 	
	 apply knowledge of the cultural needs of the community serving, and how to shape service to those people 	 acknowledge the social, economic, cultural, and behavioural factors influencing health, both at individual and population levels
Cultural safety	 mitigate the influence of own culture and beliefs on interaction with patients and decision makin 	
	 adapt practice to improve patient engagement and health outcome 	t

Ethics and professional behaviour	 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 understand institution/department protocols and ethical practices and guidelines around performing procedures if required to perform procedures, do so in accordance with institution/department protocols and ethical practices and guidelines 	 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	 integrate prevention, early detection, health maintenance, and chronic condition management, where relevant, into clinical practice work to achieve optimal and cost-effective patient care that allows maximum benefit from the available resources understand institution/department protocols and ethical practices and guidelines around performing procedures identify roles and optimal timings for diagnostic procedures critically appraise information from assessments and evaluations of risks and benefits to prioritise patients on a waiting list 	 understand the appropriate use of human resources, diagnostic interventions, therapeutic modalities, and health care facilities 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
Leadership, management, and teamwork	 prepare for and conduct clinical encounters in a well-organised and time-efficient manner work effectively as a member of multidisciplinary teams or other professional groups ensure that all important discussions with colleagues, multidisciplinary team members, and patients are appropriately documented review discharge summaries, notes, and other communications written by junior colleagues support colleagues who raise concerns about patients' safety explain critical steps, anticipated events, and equipment 	 attend relevant clinical meetings regularly ensure all relevant team members are aware that a procedure is occurring

	 requirements to teams on planned procedures provide staff with clear aftercare instructions, and explain how to recognise possible complications
Health policy, systems, and advocacy	 demonstrate capacity to engage in the surveillance and monitoring of the health status of populations in the outpatient setting understand common population health screening and prevention approaches
	 maintain good relationships with health agencies and services
	 apply the principles of efficient and equitable allocation of resources to meet individual, community, and national health needs

Knowledge guides

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

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







Knowledge guide 1 – Scientific foundations of sleep medicine (including investigations and measurements)

Advanced Training in Sleep Medicine (Adult Internal Medicine)

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

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

Pathophysiology of normal and abnormal sleep

- Sleep and circadian neurophysiology
 - » anatomy and physiology of the circadian system
 - » molecular and neural basis of the circadian system
 - » circadian, ultradian, and homeostatic processes that underpin sleep.
 - » sleep stages
 - » distinctions between REM and NREM
 - » neuroanatomical, neurobiological, and neurophysiological basis for sleep and wakefulness and for REM vs. NREM sleep
 - » normal sleep architecture: including the current classification of sleep stages, normal arousal patterns, and normal sleep movements
 - » sleep structure and sleep architecture changes with age
 - » neuroanatomical and neurophysiological basis for arousal from sleep
 - » ontogeny of sleep and of breathing irregularities in sleep
 - » cultural, social, and physical environmental factors impact on sleep
- <u>Recommended sleep duration for adults and consequences of sleep</u> loss on physical and mental health and daytime functioning
 - » interactions between sleep and wakefulness and the sensory nervous system, perception and cognition, the cardiovascular system, temperature regulation, and the endocrine system
 - influence of NREM and REM sleep and sleep arousal on respiratory, cardiovascular, endocrine, and gastrointestinal physiology
 - » influence of NREM and REM sleep and sleep arousal on the autonomic nervous system
 - » circulating hormones and inflammatory cytokines impact on sleepwake patterns, influence of pregnancy and menopause on sleep
 » impact of circadian and homeostatic systems on sleep-wake cycles
 - and propensity to daytime sleepiness
 » psychophysiology of the drowsy state
- Physiology of sleep and breathing
 - control of breathing during sleep:
 - effect of sleep on respiratory neurons
 - neuroanatomical and neurophysiologic basis of control of breathing
 - central and peripheral chemoreceptors, and hypoxic and hypercapnic ventilatory responses
 - peripheral and central afferents and inputs
 - central pattern generator as the basis for respiratory control
 - » explain the mechanics of breathing in an adult
 - breathing changes during sleep, REM vs. NREM sleep
 - » effect of sleep on breathing in respiratory and neuromuscular diseases.

	 <u>Anatomy and physiology of upper airway</u> structure and function of the upper airway role of upper airway muscles in the control of breathing when asleep and awake effects of craniofacial structure, obesity, upper airway muscle function, and ventilatory control on upper airway patency concept of the pharyngeal airway as a collapsible tube dynamic behaviour of the pharynx during breathing, when awake and asleep, and the concept of critical pressure. effects of nasal resistance on pharyngeal collapsibility
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.	 Sleep measurement and investigations Indications for sleep investigations a waveness of the key professional documents outlining the performance of sleep investigations in Australia and Aotearoa Net Zealand mechanisms, clinical features and specific measurements of common sleep disorders definition of level 1 to 4 sleep studies and devices, strength and weaknesses of each, and role of in-laboratory versus ambulatory testing indications for investigation with level 1 to 4 sleep studies indications and use of tests for sleep propensity/vigilance circumstances when sleep investigations are not indicated common questionnaire measurements of sleepiness and quality of life scores and know the limitations of these measurements what measurements are possible and appropriate for disorders listed in the ICSD-3-TR effects of medications, comorbidities such as psychiatric and medical conditions and lifestyle on sleep make patterns and how these factors can affect measurements of sleep propensity wearable devices and new technology for measuring sleep and sleep disorders; strengths and limitations Principles of measurement parameters measurements indicated for further evaluation in the event of a non-diagnostic sleep study. PSG recording age-appropriate normal sleep stage distribution and proportions respiratory events aprovals publy.phyneas active years active years scoring criteria, recognise how different scoring criteria may alter results and therefore interpretation of severity results and therefore interpretation of severity raw data from sleep studies including the following parameters: electron-oculography leg electronyography derivations airflow parameters oxygen saturation body position airway pressures measures of CO2

- Video recordings
- Limited channel sleep studies- normal and abnormal patterns, interpretation raw data. Be able to discuss the strengths and limitations
 - » overnight oximetry
 - » cardio-respiratory sleep studies
 - limited channel PSG studies
- Sleep propensity tests
 - Multiple Sleep Latency Test (MSLT)
 - Maintenance of Wakefulness Test (MWT)
- Questionnaire measurements for sleepiness and sleep disorders
- Completing sleep investigation reports for the different types of sleep studies
- Methods of measuring respiration during sleep
- Sensitivity of the different measurements of respiration
- Diaphragmatic electromyography monitoring
- Oesophageal pressure monitoring
- Positive airway pressure titration and review studies- CPAP and bilevel non-invasive ventilation
- Indications for repeat investigations
- Respiratory function tests to assess sleep breathing disorders:
 - » spirometry
 - » lung volumes
 - » gas transfer
 - » tests of respiratory muscle strength
 - » arterial blood gases (role of capillary and venous blood gas measurements)
 - » oximetry
- Chest x-ray
- Cephalometry
- Brain CT
- MRI scan
- Diaphragm testing (e.g. Maximal Inspiratory Pressures (MIP), Maximal Expiratory Pressures (MEP), and Sniff Nasal Inspiratory Pressure (SNIP))

Procedures

- Mask fitting and troubleshooting for positive airway pressure (PAP) therapy
- Application of chin strap
- Type 2 study set up

Assessment tools

- Sleep monitoring equipment
- Hardware and software of the computerised equipment used in a sleep service
- Sensor devices used to measure physiological variables as part of sleep studies
- Computerised PSG systems
- Scoring of sleep, arousals, cardiac events, movements, and respiratory events
- Sleep diaries
- Actigraphy
- Wearables and new technology

IMPORTANT SPECIFIC ISSUES

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

- Educate patients, their families, health professionals and the public about the nature, and importance of normal sleep and the detrimental effects of sleep loss.
- Influence of other disease processes on common measurement parameters:
 - » obesity
 - » respiratory muscle weakness
 - » COPD
 - » stroke
 - » Cardiovascular disease (e.g. heart failure)
- Limitations and common parameters in sleep investigation
- Infection control and prevention of cross-infection



Knowledge guide 2 – Sleep related breathing disorders

Advanced Training in Sleep Medicine (Adult Internal Medicine)

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Awaking gasping or choking Witnessed apnoea
- Cognitive impairment
- Driving or occupational risk
- Early morning headaches
- Excessive daytime sleepiness
- Impaired sleep quality
- Loud snoring
- Mood changes
- Poor concentration

Conditions

- Familiarity with international classification of sleep disorders (ICSD-3-TR) current version
- Sleep apnoea
 - » Obstructive
 - » Central
 - » Treatment-emergent Central Sleep Apnoea
- Sleep hypoventilation disorders e.g. obesity hypoventilation
- Sleep related hypoxemia disorders
- Isolated snoring

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

- Central Sleep Apnoea due to High-Altitude Periodic Breathing
- Congenital Central Alveolar Hypoventilation Syndrome
- Idiopathic Central Alveolar Hypoventilation
- Primary Central Sleep Apnoea

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

Synthesise

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

Manage

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

Consider other factors

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

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

Sleep Apnoea

- Epidemiology of Sleep Disordered Breathing (SDB) and effects of age, gender, obesity, and race on prevalence of SDB and recognise lesser-known associations
 - Public health implications of SDB including impact on:
 - » cardiovascular morbidity and mortality
 - » metabolic syndrome, diabetes, obesity, and other co-morbid medical conditions
 - » driving, work performance, and emotional/ psychological health
- Occupational and lifestyle implications of SDB
- Pathophysiology of obstructive sleep apnoea and the different phenotypes, as well as its impact upon treatment choice
- Clinical features of OSA and the differential diagnoses of OSA symptoms
- Clinical diagnosis and management of OSA complicated by respiratory failure and/or right heart failure, e.g., where SDB overlaps with other diseases such as gross obesity or chronic obstructive pulmonary disease (COPD)
- Central role of continuous positive airway pressure (CPAP) in treating OSA including side-effects, factors affecting compliance and strategies for improving compliance with treatment
- Role of upper airway surgery in the management of snoring and OSA
- Awareness of new technologies in the management of OSA
- Pathophysiology of central sleep apnoea and the different types (e.g. hypercapnic, non-hypercapnic, Cheyne Stokes respiration)
- Understand the concept of loop gain

Hypoventilation

- Physiology of ventilatory drive and gas exchange
- Role and pathophysiology of sleep-related hypoventilation in acute and chronic hypercaphic respiratory failure, including obesity, neuromuscular/chest wall disease, reduced central drive, and diseases that chronically increase respiratory load, e.g. COPD
- Indications and application of non-invasive vs. invasive ventilation for hypercapnic respiratory failure
- Use of bilevel non-invasive positive pressure ventilation in managing both acute and chronic hypercapnic respiratory failure
- Role of tracheostomy in airway management
- Role of cough assist devices and sputum clearance in patient with neuromuscular weakness

Oxygen therapy

- Indications and guidelines for use of oxygen therapy related to sleep breathing disorders
- Assessment process for oxygen therapy
- Delivery systems and use of oxygen therapy in CPAP and NIV
- Potential adverse effects of oxygen therapy

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

Investigations

- Select and interpret appropriate respiratory function tests and radiology investigations
- Understand the different types of sleep studies (level 1 to 4) and strengths and weaknesses of each
- Understand new technology for measuring sleep (e.g. wearables, nearables) strengths and weaknesses
- Interpret PSG raw data, including sleep staging and arousals, scoring respiratory events, oximetry and PTtcCO2 monitoring
- Recommend participation in PSG reporting concordance program at training site

Advanced Training Curriculum Standards Sleep Medicine (Adult Internal Medicine) consultation draft, November 2023 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.

- Definition of hypoventilation during wakefulness and sleep (including NREM and REM), distinguishing the different types and how to assess with PSG
- Evaluate clinical investigations and circumstances to formulate an individual treatment strategy
- Role of PSG and limited sleep studies in optimising non-invasive ventilator settings, patient-machine synchrony, and triggering and mask interface
- Interpret PSG findings in patients on ventilatory support and make recommendations about treatment settings
- Role of telemonitoring and remote monitoring of NIV in patients with hypercapnic respiratory failure

Procedures

- Continuous positive airway pressure (CPAP) and auto-titrating positive airway pressure (APAP)
 - » selection and application of nasal and full-face masks
 - » adjustment of device settings
 - » trouble shooting treatment problems
 - » use of chin straps
 - » use of humidification in circuits
 - » interpretation of machine data
 - » prescribe CPAP based on ambulatory APAP titration
- Oral appliance therapy
- Non-invasive bilevel positive-pressure ventilation (NIV)
 - » selection and application of masks
 - » adjustment of device settings
 - » monitoring patient progress
 - » trouble-shooting treatment problems
 - » use of humidification circuits
 - » interpretation of machine data
- Assist with weaning from invasive to non-invasive ventilation
- Apply oxygen delivery systems, such as nasal prongs, masks and high flow circuits

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.

- Synthesise history and examination to produce provisional and differential diagnosis and formulate and undertake management plan
- Recognise when referral to another specialist is indicated.
- Identify Australian and New Zealand 'Fitness to Drive' guidelines and local driver licensing requirements and assess and advise patients with SDB regarding fitness to drive
- Explain the public health implications of the high prevalence of SDB in a local context (hospital/local community) and on a national/international scale
- Apply a multidisciplinary approach in the management of sleeprelated breathing disorders, recognising the roles of other medical, nursing, and allied health professionals
- Recognise the role of community, rehabilitation, and palliative care services in the management of patients with chronic respiratory failure
- Assess the contribution of SDB to respiratory failure, with particular reference to nocturnal hypoventilation
- Manage complications from hypercapnic respiratory failure, and/or heart failure
- Manage basic tracheostomy care and refer for specialist assistance when indicated
- Manage the transition from in-hospital to home care applying knowledge of available support services and home care teams
- Understand current available weight loss strategies



Knowledge guide 3 – Central disorders of hypersomnolence

Advanced Training in Sleep Medicine (Adult Internal

EDUCATE ADVOCATE INNOVATE

Medicine)

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Cataplexy
- Decreased energyDifficulty concentrating
- Difficulty concentrating
 Difficulty working up from
- Difficulty waking up from sleep
- Excessive daytime sleepiness (EDS)
- Memory and speech difficulties
- Mood changes (e.g., irritation, anxiety)
- Sleeping more than average

Conditions

- Hypersomnia associated with a psychiatric condition
- Hypersomnia due to a medical condition or substance
- Idiopathic hypersomnia
- Insufficient sleep syndrome
- Narcolepsy type 1
- Narcolepsy type 2

LESS COMMON OR MORE COMPLEX PRESENTATIONS AND CONDITIONS

Advanced Trainees will understand these presentations and conditions.

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

Presentations

- Hallucinations
- Disinhibited behaviours
- Isolated sleep paralysis
- Conditions
- Kleine-Levin Syndrome and other variants of recurrent hypersomnia

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

Synthesise

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

Manage

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

Consider other factors

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

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

Diagnostic categories

- Primary hypersomnia's of central origin that are associated with excessive daytime sleepiness, including narcolepsy and idiopathic hypersomnolence
- Other medical conditions that are associated with excessive daytime sleepiness, recognising the actions of centrally acting pharmacological agents and their interactions with sleep.
- Contents of the ICSD-3-TR

Assessment of hypersomnolence disorders

- Genetics, presentation, and treatment of narcolepsy
- Common causes of persistent excessive daytime sleepiness in patients with treated OSA
- Common causes of hypersomnia, including behavioural and environmental factors, medication use, medical, psychiatric conditions primary sleep disorders
- Important behavioural factors that influence subjective and objective sleepiness and neurocognitive function, e.g. chronic sleep restriction

Pathophysiology

- Normal neurobiology and neuropharmacology of sleep-wake regulation
- How disease states and medication use can affect sleep-wake regulation and excessive daytime sleepiness
- Models of sleep deprivation and sleep disruption and the effects on daytime function

Impact of hypersomnolence disorders

- Impact of sleep disorders on quality of life and behaviour
- Impact of drowsiness/sleepiness on road and work safety
- Daytime neurocognitive consequences of abnormalities of sleep/wake regulation
- Occupational and lifestyle implications of excessive daytime sleepiness and other sleep disorders

INVESTIGATIONS, PROCEDURES, AND CLINICAL ASSESSMENT TOOLS

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

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

Investigations

- Take a thorough sleep history from the patient, bed partner, and other relevant persons
- Perform the relevant neurological, respiratory, neurological and general physical examinations
- Assess severity of daytime consequences of sleep disorders
- Perform a thorough history, examination, and sleep specific assessment
- Discuss the range of limited channel sleep studies available
- Synthesise patient symptoms and signs into a comprehensive differential diagnosis and plan further investigation if needed
- Interpret results of investigations regarding excessive daytime sleepiness and daytime consequences of sleep disorders in the clinical context of the patient
- Identify excessive daytime sleepiness or inability to maintain wakefulness based on tests of sleep propensity
- Essential features of a sleep study report used in clinical decision making
- Interpret raw data from sleep studies including the following parameters:
 - » Electroencephalography (EEG)
 - » Electro-oculogram (EOG)
 - » Electromyography (EMG)
 - » airflow parameters
 - » effort parameters
 - » oxygen saturation
 - » body position
 - » airway pressures
 - » measures of CO2
 - » Electrocardiography (ECG)
 - » video of motor activity including cataplexy

Procedures

- Polysomnography (PSG)
- Clinical context in which vigilance studies are indicated

	 Multiple sleep latency test (MSLT) Maintenance of wakefulness test (MWT) normative data for sleep architecture and tests of sleep propensity essential features of reports on tests of sleep propensity used in clinical decision making limitations of current available tests for assessment of excessive daytime sleepiness and daytime consequences of sleep disorders, and identify current research developments criteria for defining the severity of daytime sleepiness or inability to maintain wakefulness Sleep diary and/or actigraphy Urine drug screen (UDS) Indications for CSF orexin testing – key indications, limitations, and precautions
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.	 Explain behavioural strategies to reduce the symptoms of EDS and the daytime consequences of sleep disorders, e.g. sleep education and schedule modification Prescribe pharmacotherapy to reduce symptoms of EDS and daytime consequences of sleep disorders in accordance with state and national legislation (e.g. use of schedule 8 medications in Australia) Prescribe pharmacotherapy for REM intrusion symptoms (such as cataplexy) in patients Monitor the pharmacotherapies for CNS disorders of hypersonnolence, including recognition and management of adverse effects especially impact on mental health, e.g. anxiety Understand and advise patients on use of medications during pregnancy and whilst breast-feeding Explain occupational and lifestyle implications of excessive daytime sleepiness and daytime consequences of sleep disorders Assess and advise patients with excessive daytime sleepiness regarding fitness to drive Determine when a MSLT and MWT might be appropriate Explain and manage drug misuse and withdrawal Determine optimal treatment settings from treatment sleep study parameters Identify pathological hypersomnolence or inability to maintain wakefulness based on tests of hypersomnolence Generate reports for diagnostic and treatment sleep studies Interpret results and formulate a management plan Recognise the limitations and clinical applicability of various types of limited channel sleep studies, including overnight oximetry, cardiorespiratory sleep studies, and limited channel PSG studies Determine the requirement for further evaluation in the event of an indeterminate limited channel sleep study Recognise the indications for completion of a sleep diary: x explain the completion of a sleep flary to patients x interpret sleep diaries applying knowledge of normal sleep duration and timing according to age



Knowledge guide 4 – Sleep related movement disorders

Advanced Training in Sleep Medicine (Adult Internal Medicine)

KEY PRESENTATIONS AND CONDITIONS

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

LESS COMMON OR

PRESENTATIONS AND

Advanced Trainees will

Advanced Trainees will

that should be used to

help manage patients

and conditions.

with these presentations

understand the resources

MORE COMPLEX

understand these

presentations and

CONDITIONS

conditions.

Presentations

- Periodic limb movements in sleep
- Urge to move legs when at rest
- Uncomfortable sensations in legs
- Leg cramps
- Hypnic jerks
- Jaw pain

Conditions

- Restless leg syndrome (RLS)
- Periodic Limb Movement Disorder (PLMD)
- Sleep Bruxism
- Sleep-related leg cramps

Presentations

- Humming/groaning
- Repetitive rhythmic movements (e.g. body rocking, head rolling)

Conditions

- Propriospinal myoclonus at sleep onset (PSM)
- Rhythmic movement disorder
- Sleep-Related Hypermotor Epilepsy (SHE)
- Sleep-Related Movement Disorder due to a medical disorder, medicine, or substance

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

Synthesise

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

Manage

- » provide evidence-based management
- » prescribe therapies tailored to patients' needs and conditions
- » assess response to treatment, adherence, side-effects and drug interactions
- recognise potential complications of disease and its management, and initiate preventative strategies
- » involve multidisciplinary teams

Consider other factors

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

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

- Clinical features and differential diagnosis of sleep related movement disorders
- Rhythmic movement, sleep talking, hypnic jerks and bruxism
- Clinical features and differential diagnosis of RLS and PLMD
- Secondary causes and other precipitating factors that may cause RLS
- Psychiatric disorders with sleep movements, behaviours, and experiences as symptoms
- How periodic limb movements (PLMs) are measured
- Range of tests available to diagnose and manage sleep movement disorders, including PSG

	 Abnormalities in sleep architecture, respiration or body movements, including PLMs Actions of centrally acting pharmacological agents and their interactions with sleep and PLMS Clinical context in which limited channel sleep studies might be useful, including tests performed in the home, and the range of limited channel sleep studies available Essential features of a sleep study report used in clinical decision making and on tests of sleep propensity used in clinical decision making
INVESTIGATIONS, PROCEDURES, AND CLINICAL ASSESSMENT TOOLS Advanced Trainees will know the scientific foundation of each investigation and procedure, including relevant anatomy and physiology. They will be able to interpret the reported results of each investigation or procedure. Advanced Trainees will know how to explain the investigation or procedure to patients, families, and carers, and be able to explain procedural risk and obtain informed consent where applicable.	 Investigations Take a thorough sleep history from the patient, bed partner, and other relevant persons Perform the relevant neurological, respiratory, upper airway, and general physical examinations Assess severity of daytime consequences of sleep disorders Apply an investigation plan for suspected RLS/PLMD especially looking for secondary causes Interpret and report on typical PSG findings in PLMD, including seizure disorders Synthesise patient symptoms and signs into a comprehensive differential diagnosis and plan further investigation if needed Interpret raw data from sleep studies including the following parameters: electroencephalogram (EEG) electromyography (EMG) airflow parameters oxygen saturation body position airway pressures measures of carbon dioxide (CO2) electrocardiography
	 Procedures Polysomnographic (PSG) Multiple sleep latency test (MSLT) Electroencephalogram (EEG)
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	 Weigh and synthesise history and examination information to produce provisional and differential diagnosis and formulate and undertake management plan Explain role of video PSG and home video for diagnosis to patients Explain sensors, filters, gain, sampling times (frequencies) and linearity of the equipment used in the sleep laboratory to technical and other staff Apply and locate sensors for monitoring sleep disorders Role of non-pharmacological therapy for RLS/PLMD

- integrate these into care.
 - Prescribe and supervise drug management of RLS/PLMD including in complex patients which may require second line or combination therapy
 Monitoring for efficacy and side effects from RLS/PLMD pharmacotherapy
 - Explain dopaminergic augmentation and outline strategies for prevention, monitoring, and management
 - Treatment options for RLS/PLMD
 - Determine optimal treatment settings from treatment sleep study parameters

- Generate reports for diagnostic and treatment sleep studies
- Interpret results and formulate a management plan
- Recognise the limitations and clinical applicability of various types of limited channel sleep studies, including overnight oximetry, cardio-respiratory sleep studies, and limited channel PSG studies
- Determine the requirement for further evaluation in the event of an indeterminate limited channel sleep study
- Recognise when referral to another specialist is indicated



EDUCATE ADVOCATE INNOVATE

Knowledge guide 5 – Parasomnia

Advanced Training in Sleep Medicine (Adult Internal Medicine)

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Bedwetting
- Confusion when waking
- Daytime sleepiness
- Difficulty sleeping
- Eating/drinking with limited awareness or responsiveness
- Episodes of incomplete awakening and limited responsiveness
- Exploding sensation in head upon waking
- Inability to move upon falling asleep or waking
- Movement during sleep such as punching or kicking
- Screaming/crying when waking
- Sexual behaviours during sleep
- Sleepwalking
- Vivid dreams that cause feelings of intense fear/anxiety
- Vocalisations during sleep

Conditions

- **REM** disorders
- » Nightmare disorder
- » REM sleep behaviour disorder (RBD)
- » Sleep paralysis
- NREM disorders
 - » Confusional arousal
 - » Night terrors
 - » Sleep related eating disorder
 - » Sleepwalking
- Catathrenia (sleep-related groaning)
- Exploding head syndrome
- Sexsomnia (sleep-related sexual behaviours)
- Sleep Enuresis
- Sleep enuresis (bedwetting)
- Somniloquy

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

Synthesise

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

Manage

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

Consider other factors

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

 Exploding Head Syndrome Sleep-Related hallucinations
 Spectrum of parasomnias and the basic features of confusional arousals, sleepwalking, sleep terrors, and REM sleep behaviour disorder Principles of pharmacological and non-pharmacological management of parasomnias Differential diagnoses of parasomnias, including nocturnal frontal lobe epilepsy and psychiatric disorders Recognise co-existing sleep pathology which can exacerbate parasomnias such as obstructive sleep apnoea Impact of medications on propensity for parasomnias, such as selective serotonin reuptake inhibitors (SSRIs) and REM behaviour disorder Clinical features for NREM arousal disorders and their variants, e.g. confusional arousals, sleepwalking, and sleep terrors Compare the differences between nightmares and sleep terrors Clinical features of REM sleep behaviour disorder and its variants Neurological conditions that can cause or mimic parasomnias, such as PTSD Actions of pharmacological agents and their interactions with sleep that may exacerbate parasomnias Clinical context in which limited channel sleep studies might be useful, including tests performed in the home, and the range of limited channel sleep studies might be useful, including tests performed in the home, and the range of limited channel sleep study report used in clinical decision making and on tests of sleep propensity used in clinical decision making. Review the predisposing factors that may trigger episodes of parasomnias. Impact of sleep test findings on fitness to drive Contents of the ICSD-3-TR
 Investigations Take a thorough sleep history from the patient, bed partner, and other relevant persons Perform the relevant neurological, respiratory, and general physical examinations Recognise features which may suggest parasomnia or seizure Assess severity of daytime consequences of sleep disorders

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

- Perform a thorough history, examination, and sleep specific assessment
- Synthesise patient symptoms and signs into a comprehensive differential diagnosis and plan further investigation if needed
- Interpret and report on typical PSG findings in NREM arousal disorders, REM sleep behaviour disorder, and seizure disorders
- Interpret the clinical implications of cerebral CT and MRI scans
- Interpret video and EEG during a paroxysmal event at night and report differential diagnosis.
- Interpret raw data from sleep studies including the following parameters:
 - » airflow parameters
 - » airway pressures
 - » body position
 - » effort parameters
 - » Electrocardiography (ECG)
 - » Electroencephalography (EEG)
 - » Electromyography (EMG)
 - » electro-oculogram (EOG)
 - » measures of CO2
 - » oxygen saturation
 - » Video

Procedures

- Electroencephalogram (EEG) including full EEG
- Neurologic exams such as CT scan or MRI
- Polysomnography (PSG) including video

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.

- Weigh and synthesise history and examination information to produce provisional and differential diagnosis and formulate and undertake management plan
 - Explain role of video PSG and home video for diagnosis to patients
 - Explain sensors, filters, gain, sampling times (frequencies) and linearity of the equipment used in the sleep laboratory to technical and other staff
 - Apply and locate sensors for monitoring sleep disorders
 - Explain non-pharmacological and pharmacological measures for management of NREM parasomnias and REM sleep behaviour disorder
 - Prescribe and monitor drug management
 - Explain and manage drug misuse, side effects and withdrawal
 - Determine optimal treatment settings from treatment sleep study
 parameters
 - Generate reports for diagnostic and treatment sleep studies
 - Interpret results and formulate a management plan
 - Determine the requirement for further evaluation in the event of an indeterminate limited channel sleep study
 - Deliver comprehensive sleep education to patients, and understand the clinical and ethical implications of diagnosis of RBD and neurodegenerative disorders.
 - Recognise when referral to another specialist is indicated, such as a
 psychologist and neurologists especially in the context of REM sleep
 behaviour disorder and is associations with neurodegenerative
 diseases.
 - Recognise the indications for completion of a sleep diary:
 - » explain the completion of a sleep diary to patients
 - » interpret sleep diaries applying knowledge of normal sleep duration and timing according to age
 - » use sleep diary information to inform treatment decisions



EDUCATE ADVOCATE INNOVATE

Knowledge guide 6 – Insomnia

Advanced Training in Sleep Medicine (Adult Internal Medicine)

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

- Daytime sleepiness
 Difficulty initiating and/or maintaining sleep at night
- Fatigue
- Mood changes

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Conditions

- Insomnia » Acute insomnia
- » Chronic insomnia
- Insomnia due to irregular sleep schedules
- Paradoxical insomnia (sleep state misperception)
- Psychophysiological insomnia

LESS COMMON OR MORE COMPLEX PRESENTATIONS AND CONDITIONS

Advanced Trainees will understand these presentations and conditions.

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

Presentations

Difficulty concentrating

Conditions

- Insomnia associated with drug and alcohol use
- Insomnia due to underlying physical conditions, e.g., respiratory or neurological conditions
- Insomnia with co-morbid circadian rhythm disorder
- Insomnia with co-morbid mental health disorder

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

Synthesise

- » recognise the clinical presentation
- identify relevant epidemiology, prevalence, pathophysiology, and clinical science
- » take a comprehensive clinical history
- » conduct an appropriate examination
- » establish a differential diagnosis
- » plan and arrange appropriate investigations
- consider the impact of illness and disease on patients⁴ and their quality of life when developing a management plan

Manage

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

Consider other factors

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

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

- Definition of insomnia including within the ICSD-3-TR and the daytime consequences
- Identify different types of insomnia and their clinical features
- Discuss the interaction between other sleep disorders, such as sleep apnoea and RLS and the development of insomnia
- Interaction, overlap, and interrelationship of psychiatric disorders with sleep disorders
- Interaction, overlap, and interrelationship of medical disorders with sleep disorders
- Recognise co-morbid insomnia and OSA (COMISA) and implications for assessment and management.
- Identify circadian factors, such as shift work, advanced and delayed sleep, which may produce apparent insomnia symptoms

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

- Indications and limitations of assessment tools for insomnia, including actigraphy, sleep diaries and PSG
- The theory underlying management strategies for insomnia
- Relevant sections in ICSD-3-TR
- How pregnancy and menopause influence sleep
- Principles of pharmacological treatment options for insomnia

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.

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.

Investigations

- Take a thorough sleep history from the patient, bed partner, and other relevant persons, and ask about medications including OTC medications and recreational drug use
- Perform the relevant neurological, respiratory, and general physical examinations
- Psychiatric assessment with a focus on mood disorders
- Familiarity with validated insomnia questionnaires (eg insomnia severity index)

Procedures

- Sleep diary
 - » Explain usage to patients
 - » Interpret results
- Actigraphy
 - » Identify indications
 - » Explain the role to a patients
 - » Interpret results

- Synthesise history and examination information to produce provisional and differential diagnosis and formulate and undertake management plan
- Explain the implementation of treatment strategies for insomnia, including sleep education and behavioural measures, such as stimulus control, bedtime restriction, cognitive behavioural therapy, and relaxation therapies
- Understand the components of cognitive (e.g. cognitive restructuring) behavioural (e.g. sleep restriction) therapy for insomnia (CBT-I) and the evidence supporting this treatment as first line therapy for chronic insomnia
- Recognise when referral to another specialist is indicated, particularly specialist sleep psychologists and psychiatrists
- Assess the role of online delivered CBT especially as access to psychologists is limited
- Deliver comprehensive sleep education to patients, including the importance of sleep hygiene
- Explain and manage drug misuse and withdrawal
- · Prescribe and monitor pharmacological treatment for insomnia
- Pharmacological treatment of short-term insomnia- understand the mechanisms of action, of major drug classes, evidence for effect, and potential side effects



Knowledge guide 7 – Circadian disorders of the sleep-wake cycle

Advanced Training in Sleep Medicine (Adult Internal Medicine)

KEY PRESENTATIONS AND CONDITIONS

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

Presentations

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- Chronic sleep disturbances
- Difficulty falling asleep .
 - Difficulty waking
- Excessive daytime sleepiness •
- Insomnia symptoms •
- Mood changes, such as • depression and irritability
- Reduced concentration
- Reduced performance in work and/or social spheres
- Waking up excessively early

Conditions

- Delayed and advanced sleepwake phase disorders
- Irregular sleep-wake rhythm disorder
- Jet lag
- Non-24-hour sleep-wake rhythm disorder
- Shift work sleep-wake rhythm disorder

Presentation

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.

Sleep wake cycle disturbances related to psychiatric conditions, medications, and neuro developmental disorders

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 \gg history
- conduct an appropriate \gg examination
- establish a differential >> diagnosis
- plan and arrange appropriate \gg investigations
- consider the impact of illness >> and disease on patients and their quality of life when developing a management plan

Manage

- provide evidence-based >> management
- prescribe therapies tailored to >> patients' needs and conditions
- recognise potential \gg 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
- Normal sleep and circadian physiology

EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND CLINICAL SCIENCES

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

- Clinical features, evaluation, and management of delayed and advanced sleep phase syndrome
- Clinical features, evaluation, and management associated with jet lag and shift work related circadian rhythm disorders, and how they may produce apparent insomnia symptoms
- Occupational/driving/health risks of shift work associated circadian • rhythm disturbances
- Relationship between circadian rhythm disturbances and psychiatric disease
- Circadian effects on sleep duration and timing

- Identify and discuss common comorbidities (e.g. underlying neurological disorders, normal aging, mental health disorders) and their effect on circadian disorders, with an awareness of underlying neurobiological changes that occur
- Effect of physical impairments such as blindness on circadian disorders
- Psychosocial impact of circadian disorders, such as difficulties with employment and family life
- Principles of pharmacological management of sleep disorders
- Actions of pharmacological agents and their interactions with sleep
- Contents of the ICSD-3-TR

INVESTIGATIONS, PROCEDURES, AND CLINICAL ASSESSMENT TOOLS

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

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

Investigations

- Take a thorough sleep history from the patient, bed partner, and other relevant persons
- Perform the relevant neurological, respiratory, and general physical examinations
- Assess severity of daytime consequences of sleep disorders
- Perform a thorough history, examination, and sleep specific assessment
- Interpret subjective and objective measures of circadian rhythm
- Synthesise patient symptoms and signs into a comprehensive differential diagnosis and plan further investigation if needed
- Recognise the indications for actigraphy in the clinical context » explain carrying out actigraphy to patients
 - interpret actigraphy results applying knowledge of normal sleep duration and timing
 - » use actigraphy information to inform treatment decisions

Procedures

- Actigraphy indications, explanation to a patient, interpretation, and reporting
- Polysomnography (PSG)
- Sleep diary indications, explanation to a patient, interpretation, and reporting

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.

- Explain strategies for rapid adjustment to new schedules or time zones
- Explain the management of altered sleep phase, e.g. light therapy, bedtime scheduling, and melatonin administration
- Consideration of lifestyle modifications
- Explain role of video PSG and home video for diagnosis to patients
- Explain sensors, filters, gain, sampling times (frequencies) and linearity of the equipment used in the sleep laboratory to technical and other staff
- Apply and locate sensors for monitoring sleep disorders
- Prescribe and give advice about use of pharmacotherapy, in particular melatonin and melatonin agonists
- Explain and manage drug misuse and withdrawal
- Determine optimal treatment settings from treatment sleep study parameters:
 - » Generate reports for diagnostic and treatment sleep studies
 - » Interpret results and formulate a management plan
 - » Determine the requirement for further evaluation in the event of an indeterminate limited channel sleep study
- Deliver comprehensive sleep education to patients
- Recognise when referral to another specialist is indicated
- Recognise the indications for completion of a sleep diary:
 » explain the completion of a sleep diary to patients

- interpret sleep diaries applying knowledge of normal sleep » duration and timing according to age use sleep diary information to inform treatment decisions
- »

Advanced Training Curriculum Standards Sleep Medicine (Adult Internal Medicine) consultation draft, November 2023