



The Royal Australasian
College of Physicians

Neurology

Advanced Training Curriculum

Adult Medicine Division



AUSTRALIAN & NEW ZEALAND
ASSOCIATION OF NEUROLOGISTS



The Royal Australasian
College of Physicians

Physician Readiness for Expert Practice (PREP) Training Program

Neurology Advanced Training Curriculum

TO BE USED IN CONJUNCTION WITH:

Basic Training Curriculum – Adult Internal Medicine
Professional Qualities Curriculum

ACKNOWLEDGEMENTS

Royal Australasian College of Physicians (RACP) Fellows, trainees and staff have contributed to the development of this curriculum document.

The College specifically thanks those Fellows and trainees who have generously contributed to the development of these documents, through critical comments drawn from their knowledge, experience and the donation of their time and professional expertise.

The following Fellows and trainees deserve specific mention for their contribution:

- A/Prof Peter Hand, FRACP
- Prof Richard Macdonell, FRACP
- A/Prof Christian Lueck, FRACP
- CA/Prof Richard Frith, FRACP
- Prof Stephen Davis, FRACP
- Prof Matthew Kiernan, FRACP
- Prof Alan Barber, FRACP
- Dr Amy Brodtmann, FRACP
- Dr Thomas Kimber, FRACP
- Dr Bruce Campbell, FRACP
- Dr Deborah Field

Development of the Neurology Advanced Training Curriculum was overseen by the Specialty Training Committee in Neurology. A group of Fellows met to discuss and agree on the aims of the curriculum, the outline of the curriculum, and to determine appropriate content. The curriculum was written by the Chair of the group, and all members of the group provided feedback. The curriculum was then sent to a further group of Fellows who reviewed the document and suggested changes. The final document incorporating the changes was ratified by the Specialty Training Committee in Neurology.

The process was managed by the Curriculum Development Unit within the College's Education Deanery, who designed the document, drafted content material, organised and facilitated writing workshops, developed resource materials, and formatted the final document.

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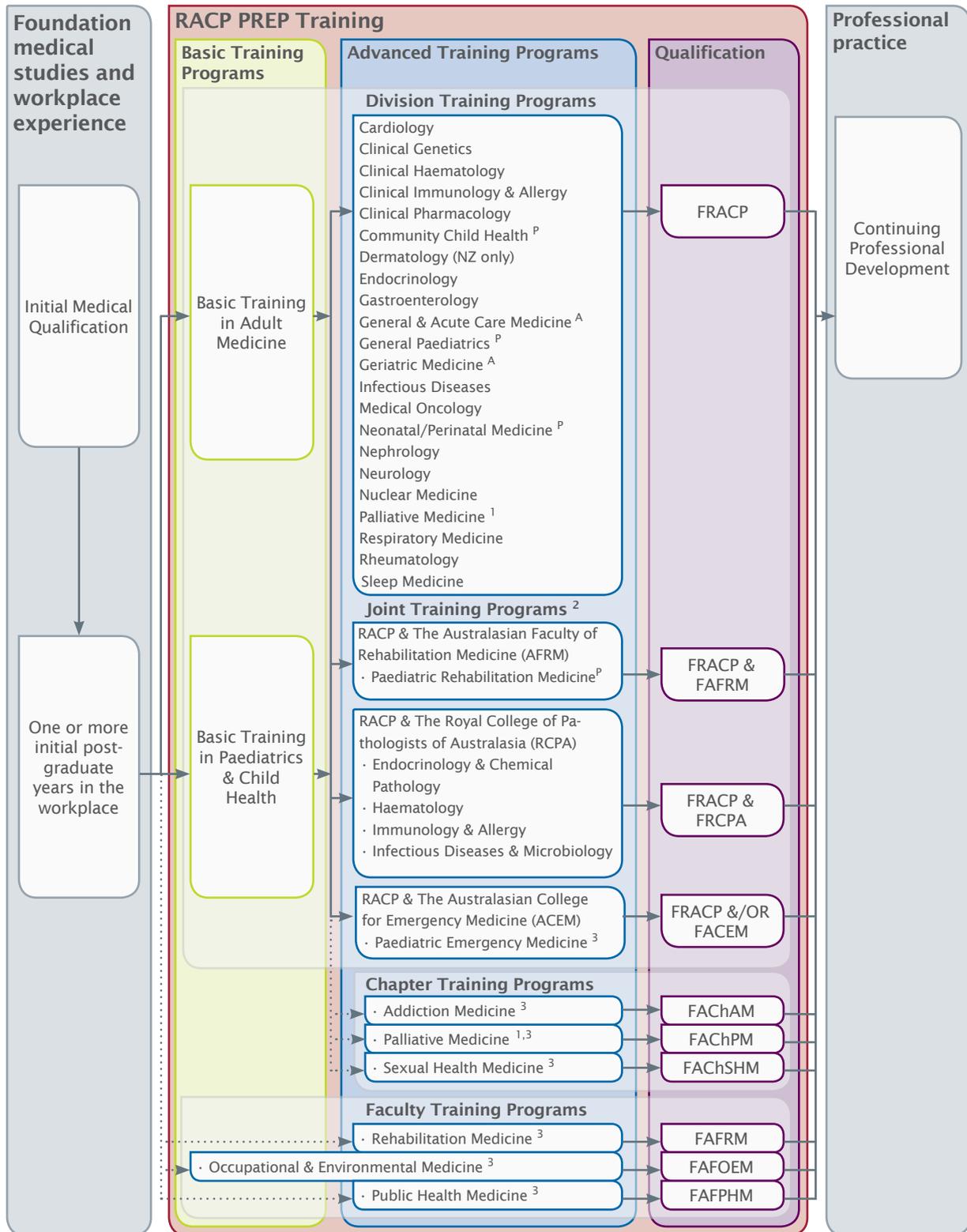
1st edition 2010 (revised 2013).

Please note: No Domains, Themes or Learning Objectives have been updated for this edition; design changes ONLY.

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RACP FELLOWSHIP TRAINING PATHWAYS AND THE CONTINUUM OF LEARNING



^P Trainees must complete Basic Training in Paediatrics & Child Health to enter this program.

^A Trainees must complete Basic Training in Adult Medicine to enter this program.

¹ Trainees who have entered Advanced Training in Palliative Medicine via a RACP Basic Training Program will be awarded FRACP upon completion and may subsequently be awarded FACHPM. Trainees who have NOT entered Advanced Training in Palliative Medicine via a RACP Basic Training Program will only be awarded FACHPM upon completion.

² The Child & Adolescent Psychiatry Joint Training Program with the Royal Australian and New Zealand College of Psychiatrists (RANZCP) is currently under review by the RACP and RANZCP and closed to new entrants at present.

³ Alternative entry requirements exist for these training programs; please see the corresponding PREP Program Requirements Handbook for further information.

NB1: This diagram only depicts training programs that lead to Fellowship. Please see the RACP website for additional RACP training programs.

NB2: For further information on any of the above listed training programs, please see the corresponding PREP Program Requirements Handbook.

OVERVIEW OF THE SPECIALTY

The practice of neurology encompasses the diagnosis and management of diseases affecting the central, peripheral and autonomic nervous systems as well as muscle. A neurologist is a skilled diagnostician who reaches an accurate diagnosis by taking a detailed history, performing a thorough neurological examination, and then investigating patients rationally by using tools, such as imaging, lumbar puncture (LP), neurophysiology and/or neuropsychology. A neurologist is expected to be skilled in the performance and interpretation of nerve conduction studies (NCS), electromyography (EMG) and electroencephalography (EEG).

A neurologist must be aware of the evidence that supports his/her management decisions. In addition, a neurologist may need to treat psychological complications, liaise with other medical and allied health professionals, and/or be involved in rehabilitation. Some neurological conditions are untreatable so the neurologist must be able to provide a prognosis and support to these patients and their carers as well as being able to manage end-of-life (EOL) issues.

There are many future challenges for neurologists. The rapid expansion in knowledge, particularly in areas of diagnosis and treatment, necessitates skills in keeping up to date and the neurologist must identify appropriate resources to do this. Particularly in large teaching hospitals, neurologists will increasingly act as subspecialists with particular expertise in the diagnosis and treatment of a small number of conditions. Conversely, there is also a growing need to provide high quality care to non-metropolitan areas; neurologists in these areas will require knowledge and skills in a broader range of conditions.

CURRICULUM OVERVIEW

Neurology – Advanced Training Curriculum

This curriculum outlines the broad concepts, related learning objectives and the associated theoretical knowledge, clinical skills, attitudes and behaviours required and commonly used by neurologists within Australia and New Zealand. It emphasises the skills required of a neurologist, particularly in diagnosis and management. Common neurological presentations are outlined, along with examples of the common conditions with which the trainee must be familiar.

The purpose of Advanced Training is to assist trainees to build on the cognitive and practical skills acquired during Basic Training. By completion of the Neurology Advanced Training Program, trainees should be competent to deliver unsupervised comprehensive medical care to patients with neurological disorders at consultant level.

Attaining competency in all aspects of this curriculum is expected to take a minimum of three years. It is expected that all teaching, learning, and assessment associated with this curriculum will be undertaken within the context of the trainee's everyday clinical practice. As such it will be implemented in such a way as to accommodate both current workplace and workforce issues as well as the needs of health service provision.

There are learning objectives that overlap with, or easily relate to, other domains. Such objectives have been assigned to only one area of the curriculum to avoid repetition. In practice it is anticipated that the interrelations of each objective will be explored within the teaching/learning environment.

Note: The curriculum should always be read in conjunction with the relevant College Training Handbook available on the College website.

Professional Qualities Curriculum

The Professional Qualities Curriculum (PQC) outlines the range of concepts and specific learning objectives required by, and used by, all physicians, regardless of their specialty or area of expertise. It spans both the Basic and Advanced Training Programs and is also used as a key component of the CPD program.

Together with the various Basic and Advanced Training Curricula, the PQC integrates and fully encompasses the diagnostic, clinical, and educative-based aspects of the physician's/paediatrician's daily practice.

Each of the concepts and objectives within the PQC will be taught, learnt, and assessed within the context of everyday clinical practice. Thus, it is important that they be aligned with, and fully integrated into, the learning objectives within this curriculum.

EXPECTED OUTCOMES AT THE COMPLETION OF TRAINING

Graduates from this training program will be equipped to function effectively within the current and emerging professional, medical, and societal contexts. At the completion of the Neurology Advanced Training Program, as defined by this curriculum, it is expected that a new Fellow will have acquired the theoretical knowledge and have developed the required clinical skills for competent practice as a neurologist. It is expected that a new Fellow will be able to:

- demonstrate a sound knowledge of neuroanatomy, neurophysiology, neurogenetics, neuroimmunology, neuropharmacology, and neuropathology
- demonstrate a sound knowledge of neurological conditions, including those which are common, those which are rare, and those which need to be dealt with as emergencies
- take a detailed neurological history and perform an accurate neurological examination
- demonstrate a sound knowledge of the indications, diagnostic potential, and limitations of neurological investigations, thereby permitting the rational use of these investigations in patients with neurological problems
- conduct and interpret clinical neurophysiology tests
- demonstrate a sound knowledge of the management of neurological conditions both in terms of pharmacological treatment and other interventions
- communicate effectively with patients, their carers, and other health professionals
- make effective use of colleagues in rehabilitation medicine, neurosurgery, intensive care, neuropsychiatry, and palliative care
- demonstrate the inherent skills required of a consultant physician, particularly self-motivated learning, teaching, and an understanding of research principles.

CURRICULUM THEMES AND LEARNING OBJECTIVES

Each of the curriculum documents has been developed using a common format, thereby ensuring a degree of consistency and approach across the spectrum of training.

Domains

The domains are the broad fields which group common or related areas of learning.

Themes

The themes identify and link more specific aspects of learning into logical or related groups.

Learning Objectives

The learning objectives outline the specific requirements of learning. They provide a focus for identifying and detailing the required knowledge, skills, and attitudes. They also provide a context for specifying assessment standards and criteria as well as providing a context for identifying a range of teaching and learning strategies.

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DOMAIN 1	CLINICAL APPROACH
Theme 1.1	History Taking
Learning Objective 1.1.1	Elicit a comprehensive history from a patient and/or their carers
<p><i>A large part of the practice of neurology involves interaction with patients to obtain a clear history. Most often, the diagnosis is arrived at on the basis of the history rather than from the examination. A neurologist must be able to clarify the nature of the patient's presenting problem and then to combine this with other relevant information about the patient and a detailed knowledge of neurological diseases in order to generate a diagnostic hypothesis and/or a differential diagnosis. The detail of the history required will vary according to circumstances. In general, when seeing a patient for the first time, a comprehensive history should be taken.</i></p>	
<h3>Knowledge and Skills</h3>	
<ul style="list-style-type: none"> • identify the mechanisms by which underlying neuroanatomical, neurophysiological, and neuropathological processes result in neurological symptoms • describe the way neurological diseases, both common and rare, acute and chronic, present clinically • plan an appropriate strategy for questioning patients and others to obtain the information necessary to generate a clear neurological, family, social, and medical history. Specific aspects of this include determination of: <ul style="list-style-type: none"> • the history of the presenting problem, including symptom onset, duration, and course of the condition, associated symptoms and previous therapeutic interventions • other medical conditions, current or previous, and their relevance • other factors which may be relevant, e.g. pharmacological, environmental, genetic, or social factors • the patient's view of the problem, their level of background knowledge, and their expectations • use the data obtained from the history to generate a: <ul style="list-style-type: none"> • diagnostic hypothesis/differential diagnosis • strategy for examination (see Theme 1.2) • strategy for investigation (see Domain 3). 	

DOMAIN 1	CLINICAL APPROACH
Theme 1.2	Neurological Examination
Learning Objective 1.2.1	Conduct a detailed neurological examination
<p><i>Neurologists have the ability to perform a detailed examination, a skill underpinned by a comprehensive knowledge of neuroanatomy. The examination is used to test hypotheses generated when taking the history, and it helps guide further investigation. A neurologist must be competent in the examination of cognition/mental state, cranial nerves, motor and sensory functions of the limbs and gait, as well as certain other specific areas. A neurologist must be able to adapt the examination to the requirements of the situation. In specific situations, certain quantitative rating scales are used. Awareness of these scales, and how to apply them, is required.</i></p> <p><i>NB: Knowledge of examination skills relating to other organ systems are assumed.</i></p>	
<h3>Knowledge and Skills</h3>	
<ul style="list-style-type: none"> • identify the mechanisms by which underlying neuroanatomical, neurophysiological, and neuropathological processes result in abnormal neurological signs 	

DOMAIN 1	CLINICAL APPROACH
Theme 1.2	Neurological Examination
Learning Objective 1.2.1	Conduct a detailed neurological examination
<ul style="list-style-type: none"> describe and perform various examination techniques to assess: <ul style="list-style-type: none"> cognition/mental state cranial nerve function motor function and reflexes coordination and gait sensory function inconsistency, e.g. in functional illness explain the purpose of the examination to patients use the information obtained from the examination to: <ul style="list-style-type: none"> confirm/refute the diagnostic hypothesis/differential diagnosis arrived at from the history refine the strategy for investigation arrived at from the history identify and use quantitative rating scales, e.g. the National Institute of Health Stroke Scale (NIHSS), the Expanded Disability Status Scale (EDSS) for multiple sclerosis (MS). 	

DOMAIN 1	CLINICAL APPROACH
Theme 1.3	Diagnosis and Management
Learning Objective 1.3.1	Formulate a diagnosis, differential diagnosis, and management plan
Knowledge and Skills	
<ul style="list-style-type: none"> synthesise key information obtained from history, examination, and investigation to generate an accurate diagnostic hypothesis/differential diagnosis plan necessary investigations within an appropriate time frame reconsider and, if necessary, revise a diagnosis if and when new information becomes available, e.g. results of investigations describe current evidence-based pharmacological therapy and other forms of management for various diseases and disorders and instigate appropriate treatment formulate an immediate and long-term plan of management identify how and when to access additional resources and/or to refer patients to other neurologists, neurosurgeons, rehabilitationists, or other specialist physicians. 	

DOMAIN 1	CLINICAL APPROACH
Theme 1.4	Presentation and Communication Skills
Learning Objective 1.4.1	Present and discuss a patient's history, examination findings, investigation results, and management plan
Learning Objective 1.4.2	Present case presentations and reviews at clinical meetings

Adequate communication is the cornerstone of patient management. A neurologist must be able to summarise a patient's key clinical and investigation findings succinctly, reach a diagnosis and management plan, and present all of these both verbally and in written form.

A neurologist must be able to work as a member of a multidisciplinary team (MDT), respecting the roles of the other members of the team, and be able to communicate effectively with patients, their families, and sometimes third parties, while at the same time ensuring confidentiality.

Knowledge and Skills

- describe the principles underpinning effective communication
- discuss issues relating to patient confidentiality and legal requirements
- present the following patient information verbally and document in written form:
 - the key clinical findings of the history and examination
 - the results of investigation
 - the diagnosis or differential diagnosis
 - the proposed plan of management
- discuss the above with other members of the medical, nursing, and allied health staff, including patients' GPs
- explain and discuss a diagnosis, prognosis, and plan of management with patients and their family members in a clear and sympathetic manner
- present clinical cases or pertinent literature reviews to an audience of peers, e.g. in journal clubs or grand rounds
- provide appropriate written reports to third parties, e.g. the driver licensing authority and solicitors
- communicate with hospital managers, and if necessary, insurers, lawyers, or other interested parties so as to provide successful advocacy for patients or services delivering care to patients
- participate as a member of a MDT and, when appropriate, lead the team.

DOMAIN 2	PRESENTING PROBLEMS
Theme 2.1	Disorders of Consciousness, Including Delirium
Learning Objective 2.1.1	Assess, diagnose, and manage patients presenting with disorders of consciousness
Causes of Disorders of Consciousness Include:	
<ul style="list-style-type: none"> • structural causes, e.g. stroke, space occupying lesions, including haemorrhage, abscess, and tumour 	
<ul style="list-style-type: none"> • metabolic and toxic causes, e.g. prescribed and illicit drugs, hypoglycaemia, hepatic, and renal failure 	
<ul style="list-style-type: none"> • inflammatory and infectious causes, e.g. systemic infection and encephalitis 	
<ul style="list-style-type: none"> • epilepsy and syncope 	
Knowledge and Skills	
<ul style="list-style-type: none"> • identify the neuroanatomy, neurophysiology and neuropharmacology of brain and brainstem mechanisms involved in the maintenance of normal consciousness • describe the pathological mechanisms which result in decreased consciousness • identify and describe diseases, common and rare, acute and chronic, which result in decreased consciousness, including those listed above • assess a patient's level of consciousness using a scale such as the Glasgow Coma Score and explain the limitations of these scales • form a diagnosis, including differential diagnosis, based on history and examination • request appropriate investigations • offer patients and their carers an appropriate prognosis • apply and interpret brain death criteria • recognise and describe specific conditions which result in prolonged disturbance of consciousness, such as persistent vegetative state and minimally conscious state • recognise and describe specific conditions which mimic disturbance of consciousness, such as locked-in syndrome, acute dysphasic, e.g. stroke, or functional disorders, e.g. non-epileptic status epilepticus. 	

DOMAIN 2	PRESENTING PROBLEMS
Theme 2.2	Disorders of Memory, Including Dementia
Learning Objective 2.2.1	Assess, diagnose, and manage patients presenting with dementia
Causes of Dementia Include:	
<ul style="list-style-type: none"> • transient causes, e.g. transient global amnesia and transient epileptic amnesia 	
<ul style="list-style-type: none"> • reversible causes, e.g. pseudodementia of depression, metabolic disease, B12 deficiency, hypothyroidism, thiamine deficiency – normal pressure hydrocephalus and immune-related encephalopathies 	
<ul style="list-style-type: none"> • neurodegenerative diseases, e.g. Alzheimer’s disease, fronto-temporal dementia, dementia with Lewy bodies and vascular dementia 	
<ul style="list-style-type: none"> • prion diseases, e.g. Creutzfeldt-Jakob disease 	
Knowledge and Skills	
<ul style="list-style-type: none"> • identify the neuroanatomy, neurophysiology, and neuropharmacology of normal memory function • describe the pathological mechanisms which result in disturbed memory function and identify the way disorders of memory can present • identify and describe diseases, common and rare, acute and chronic, which result in disorders of memory, including those listed above • assess memory using scores such as the mini-mental status examination, the Montreal Cognitive Assessment and the Cambridge Cognitive Assessment, and explain the limitations of these measures • form a diagnosis, including differential diagnosis, based on history and examination • discuss the prognosis and implications, e.g. driving, institutional care, of neurodegenerative diseases causing dementia • recognise and describe specific conditions which mimic disturbance of memory, such as psychiatric disorders, e.g. fugue state. 	

DOMAIN 2	PRESENTING PROBLEMS
Theme 2.3	Disorders of Sleep
Learning Objective: 2.3.1	Assess, diagnose, and manage patients presenting with the neurological causes of sleep disorders
Causes of Disordered Sleep Include:	
<ul style="list-style-type: none"> • primary disorders, e.g. hypersomnias and parasomnias, narcolepsy, and obstructive sleep apnoea 	
<ul style="list-style-type: none"> • secondary disorders, e.g. psychiatric disease and drugs 	
Knowledge and Skills	
<ul style="list-style-type: none"> • identify the neuroanatomy, neurophysiology, and neuropharmacology of normal sleep function • describe the pathological mechanisms which result in disturbed sleep and describe the way disorders of sleep can present • identify and describe diseases, common and rare, primary and secondary, which result in disorders of sleep, including those listed above • assess sleep using scores such as the Epworth Sleepiness Scale, and explain the limitations of these measures • form a diagnosis, including differential diagnosis, based on history and examination • request appropriate investigations, including polysomnography or referral to a sleep physician • discuss the prognosis and implications of sleep disorders, e.g. driving • recognise the overlap with specific neurological syndromes, e.g. Parkinson's disease and rapid eye movement sleep behavioural disorders. 	

DOMAIN 2	PRESENTING PROBLEMS
Theme 2.4	Headache and Facial Pain
Learning Objective 2.4.1	Assess, diagnose, and manage patients presenting with headache and facial pain
Causes of Headache and Facial Pain Include:	
<ul style="list-style-type: none"> • primary headache disorders, e.g. migraine, tension-type headache, cluster headache, trigeminal neuralgia, trigeminal autonomic cephalgias, and sex headache 	
<ul style="list-style-type: none"> • secondary headache disorders, e.g. giant cell arteritis (GCA), subarachnoid haemorrhage, meningitis, raised intracranial pressure, and low pressure headaches 	
Knowledge and Skills	
<ul style="list-style-type: none"> • identify the neuroanatomy, neurophysiology, and neuropharmacology involved in the generation of headache and facial pain • identify and describe diseases, common and rare, primary and secondary, which result in headache and facial pain, including those listed above • explain the importance of early diagnosis and treatment of acute conditions, such as subarachnoid haemorrhage, meningitis and GCA • form a diagnosis, including differential diagnosis, based on history and examination • request appropriate investigations • discuss the prognosis and implications of headache and facial pain • recognise the overlap with other medical conditions, such as depression. 	

DOMAIN 2	PRESENTING PROBLEMS
Theme 2.5	Seizures and Syncope
Learning Objective 2.5.1	Assess, diagnose, and manage patients presenting with seizures and syncope
Causes of Seizures and Syncope:	
<ul style="list-style-type: none"> • epileptic disorders, e.g. primary generalised epilepsies, lesion-related epilepsies, metabolic disturbance and status epilepticus 	
<ul style="list-style-type: none"> • non-epileptic disorders, e.g. non-epileptic seizures and non-epileptic pseudo-status 	
<ul style="list-style-type: none"> • syncope, e.g. vasovagal syncope, cardiac arrhythmias, dehydration, carotid sinus hypersensitivity and autonomic failure 	
Knowledge and Skills	
<ul style="list-style-type: none"> • identify the neuroanatomy, neurophysiology, and neuropharmacology involved in the generation of epilepsy and syncope • identify and describe diseases, common and rare, primary and secondary, which result in seizures and syncope, including those listed above • describe the classification and clinical features of the different types of epileptic seizure and epileptic syndrome • form a diagnosis, including differential diagnosis, based on history and examination • request appropriate investigations, including EEG, brain imaging, and cardiac investigations • discuss the prognosis and implications of seizures and syncope, e.g. driving and pregnancy • recognise the overlap with other medical conditions, e.g. cardiac disorders syncope, depression, and non-epileptic disorders. 	

DOMAIN 2	PRESENTING PROBLEMS
Theme 2.6	Disorders of Vision and Other Special Senses
Learning Objective 2.6.1	Assess, diagnose, and manage patients presenting with disturbance of vision and other special senses

Causes of Visual and Other Special Sensory Disorders Include:

- **disorders causing visual loss**, e.g. anterior pathway (anterior ischaemic optic neuropathy, GCA, and optic neuritis) chiasmal compression, posterior pathway (stroke and posterior cortical atrophy)
- **disorders causing papilloedema or other causes of optic disc swelling**, e.g. intracranial space-occupying lesions, idiopathic intracranial hypertension and cerebral venous sinus thrombosis
- **disorders causing double vision**, e.g. ocular motor nerve palsies, internuclear ophthalmoplegia and myasthenia gravis
- **disorders causing positive visual symptoms**, e.g. migraine and Charles Bonnet syndrome
- **disorders causing hearing loss or tinnitus**, e.g. acoustic neuroma, raised intracranial pressure, and stroke
- **disorders causing loss of smell or taste**, e.g. orbitofrontal tumours and neurodegenerative conditions

Knowledge and Skills

- identify the neuroanatomy and neurophysiology of the visual, pupillary, oculomotor, auditory, and olfactory systems
- identify and describe diseases, common and rare, acute and chronic, which cause visual loss, papilloedema, double vision, and disorders of the special senses, including those listed above
- outline the methods of assessing visual acuity, visual fields, confrontation and automated perimetry, pupillary function and perform a direct ophthalmoscopy
- form a diagnosis, including differential diagnosis, based on history and examination
- request appropriate investigations
- discuss the prognosis and implications of these disorders
- recognise the overlap with other medical specialties, such as ophthalmology and ENT surgery, and when it is appropriate to refer patients.

DOMAIN 2	PRESENTING PROBLEMS
Theme 2.7	Vertigo, Dizziness, and Disequilibrium
Learning Objective 2.7.1	Assess, diagnose, and manage patients presenting with vertigo and other forms of dizziness and disequilibrium
Causes of Vertigo, Dizziness, and Disequilibrium Include:	
<ul style="list-style-type: none"> • peripheral disorders, labyrinthine, and vestibular nerve, e.g. benign positional vertigo, Ménière's disease, and acute labyrinthitis 	
<ul style="list-style-type: none"> • central disorders, vestibular and cerebellar, disorders, e.g. MS and stroke 	
<ul style="list-style-type: none"> • psychological disorders, e.g. hyperventilation and anxiety syndromes 	
Knowledge and Skills	
<ul style="list-style-type: none"> • identify the neuroanatomy and neurophysiology of the vestibular and cerebellar systems • identify and describe diseases, common and rare, acute and chronic, which cause vertigo, dizziness, and disequilibrium, including those listed above • outline the methods of assessing vestibular function, e.g. Hallpike manoeuvre, head impulse test, and caloric testing • form a diagnosis, including differential diagnosis, based on history and examination • request appropriate investigations • discuss the prognosis and implications of these disorders • recognise the overlap with other medical specialties such as ENT surgery, and when it is appropriate to refer patients. 	

DOMAIN 2	PRESENTING PROBLEMS
Theme 2.8	Disorders of Gait and Balance
Learning Objective 2.8.1	Assess, diagnose, and manage patients presenting with gait and balance disorders
Causes of Gait and Balance Disorders Include:	
<ul style="list-style-type: none"> • disorders of the cerebral hemispheres, e.g. gait apraxia, normal pressure hydrocephalus, and cerebrovascular disease 	
<ul style="list-style-type: none"> • disorders of the basal ganglia, e.g. Parkinson's disease and progressive supranuclear palsy 	
<ul style="list-style-type: none"> • disorders of the cerebellum, e.g. drugs and toxins, MS and spinocerebellar atrophy 	
<ul style="list-style-type: none"> • disorders of the vestibular pathways, e.g. peripheral and central disorders 	
<ul style="list-style-type: none"> • disorders of spinal cord and peripheral nerves, e.g. transverse myelitis, hereditary spastic paraplegia, peripheral nerve diseases, including vitamin B12 deficiency 	
<ul style="list-style-type: none"> • psychological disorders, e.g. conversion disorder 	
Knowledge and Skills	
<ul style="list-style-type: none"> • identify the neuroanatomy and neurophysiology of the neurological pathways involved in gait and balance • identify and describe diseases, common and rare, acute and chronic, which cause disorders of gait and balance, including those listed above • form a diagnosis, including differential diagnosis, based on history, and examination • request appropriate investigations • discuss the prognosis and implications of these disorders • recognise the overlap with other allied health and medical specialties, such as physiotherapy and rehabilitation medicine, and when it is appropriate to refer patients. 	

DOMAIN 2	PRESENTING PROBLEMS
Theme 2.9	Movement Disorders
Learning Objective 2.9.1	Assess, diagnose, and manage patients presenting with movement disorders
Causes of Movement Disorders Include:	
<ul style="list-style-type: none"> • hyperkinetic disorders, e.g. Huntington's chorea, myoclonus, dystonic syndromes and tics 	
<ul style="list-style-type: none"> • hypokinetic disorders, e.g. idiopathic Parkinson's disease and other parkinsonian syndromes 	
<ul style="list-style-type: none"> • causes of tremor, e.g. Parkinson's disease and benign essential tremor 	
<ul style="list-style-type: none"> • psychological disorders, e.g. conversion disorder and malingering 	
Knowledge and Skills	
<ul style="list-style-type: none"> • identify the neuroanatomy, neurophysiology, and neuropharmacology of the motor pathways • identify and describe diseases, common and rare, acute and chronic, which cause disorders of movement, including those listed above • form a diagnosis, including differential diagnosis, based on history and examination • request appropriate investigations • discuss the prognosis and implications of these disorders • recognise the overlap with other allied health and medical specialties, such as physiotherapy, medical genetics and rehabilitation medicine, and when it is appropriate to refer patients. 	

DOMAIN 2	PRESENTING PROBLEMS
Theme 2.10	Stroke and Related Syndromes
Learning Objective 2.10.1	Assess, diagnose, and manage patients presenting with stroke
Causes of Stroke Syndromes Include:	
<ul style="list-style-type: none"> • ischaemic disorders, e.g. transient ischaemic attacks, amaurosis fugax, acute thromboembolic ischaemic stroke and watershed infarcts 	
<ul style="list-style-type: none"> • haemorrhagic disorders, e.g. subarachnoid haemorrhage, primary intracranial haemorrhage and venous infarction 	
<ul style="list-style-type: none"> • stroke mimics, e.g. migraine, mitochondrial disorders and conversion disorder 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe the vascular anatomy, arterial blood supply and venous drainage of the brain and spinal cord • identify and describe causes of stroke syndromes, ischaemic, haemorrhagic diseases and mimics, including those listed above • form a diagnosis, including differential diagnosis, based on history and examination • request appropriate investigations • describe current evidence-based pharmacological therapy and other forms of management of stroke and related syndromes, in relation to the acute situation, rehabilitation, and prophylaxis • instigate appropriate treatment • discuss the prognosis and implications of these disorders • recognise the overlap with other allied health and medical specialties, such as physiotherapy, occupational therapy, speech pathology and rehabilitation medicine, and when it is appropriate to refer patients. 	

DOMAIN 2	PRESENTING PROBLEMS
Theme 2.1.1	Disorders of Speech, Language, and Swallowing
Learning Objective 2.11.1	Assess, diagnose, and manage patients presenting with speech, language and swallowing disorders
Causes of Disorders of Speech, Language and Swallowing Include:	
<ul style="list-style-type: none"> • disturbance of cortical language areas, e.g. stroke and degenerative disease 	
<ul style="list-style-type: none"> • disorders of cerebellar, brainstem, or neuromuscular function, e.g. stroke, MS, myasthenia gravis, and motor neurone disease 	
<ul style="list-style-type: none"> • psychological disorders, e.g. conversion disorder 	
Knowledge and Skills	
<ul style="list-style-type: none"> • identify the neuroanatomy and neurophysiology of the pathways involved with speech and swallowing • identify and describe diseases, common and rare, acute and chronic, which cause disorders of speech, language and swallowing, dysphasia, dysarthria and dysphagia, including those listed above • form a diagnosis, including differential diagnosis, based on history and examination • request appropriate investigations • discuss the prognosis and implications of these disorders • recognise the overlap with other allied health and medical specialties, such as speech pathology and rehabilitation medicine, and when it is appropriate to refer patients. 	

DOMAIN 2	PRESENTING PROBLEMS
Theme 2.12	Weakness
Learning Objective 2.12.1	Assess, diagnose, and manage patients presenting with weakness
Causes of Weakness Include:	
<ul style="list-style-type: none"> • disorders of the brain and brain stem, e.g. Bell's palsy, stroke, and MS 	
<ul style="list-style-type: none"> • disorders of the spinal cord, e.g. MS, neuromyelitis optica, spinal cord compression and motor neurone disease 	
<ul style="list-style-type: none"> • disorders of peripheral nerves, e.g. Guillain-Barré syndrome, other acquired and inherited peripheral neuropathies, entrapment neuropathies, radiculopathies, and plexopathies 	
<ul style="list-style-type: none"> • disorders of the neuromuscular junction, e.g. myasthenia gravis, Lambert-Eaton myasthenic syndrome, and botulism 	
<ul style="list-style-type: none"> • disorders of muscle, e.g. rhabdomyolysis, inflammatory myopathies, polymyositis, dermatomyositis, inherited muscle diseases, dystrophia myotonica, and muscular dystrophies 	
<ul style="list-style-type: none"> • psychological disorders: e.g. conversion disorder 	
Knowledge and Skills	
<ul style="list-style-type: none"> • identify the neuroanatomy, neurophysiology, and neuropharmacology of the motor pathways, peripheral nerves, neuromuscular junction and somatic musculature • identify and describe diseases, common and rare, acute and chronic, which cause weakness, including those listed above • form a diagnosis, including differential diagnosis, based on history and examination • request appropriate investigations • discuss the prognosis and implications of these disorders • recognise the overlap with other allied health and medical specialties, such as physiotherapy, medical genetics, immunology and rehabilitation medicine, and when it is appropriate to refer patients. 	

DOMAIN 2	PRESENTING PROBLEMS
Theme 2.13	Sensory Loss and Pain
Learning Objective 2.13.1	Assess, diagnose, and manage patients presenting with sensory loss and pain
Causes of Sensory Loss and Pain Include:	
<ul style="list-style-type: none"> • disorders of the brain, e.g. stroke and MS - see headache and facial pain (Theme 2.4) 	
<ul style="list-style-type: none"> • disorders of the spinal cord, e.g. MS, neuromyelitis optical, and spinal cord compression 	
<ul style="list-style-type: none"> • disorders of peripheral nerves, e.g. Guillain-Barré syndrome, other acquired and inherited peripheral neuropathies, entrapment neuropathies, radiculopathies, and plexopathies 	
<ul style="list-style-type: none"> • psychological disorders, e.g. conversion disorder 	
Knowledge and Skills	
<ul style="list-style-type: none"> • identify the neuroanatomy, neurophysiology, and neuropharmacology of the sensory pathways, pain pathway, and peripheral nerves • describe diseases, common and rare, acute and chronic, which cause sensory disturbance and pain, including those listed above • form a diagnosis, including differential diagnosis, based on history and examination • request appropriate investigations • discuss the prognosis and implications of these disorders • recognise the overlap with other allied health and medical specialties, such as physiotherapy, pain services, rehabilitation medicine, and when it is appropriate to refer patients. 	

DOMAIN 3	INVESTIGATIONS
Theme 3.1	Neuroimaging
Learning Objective 3.1.1	Select appropriate neuroimaging techniques and interpret results of tests
Neuroimaging Investigations Include:	
<ul style="list-style-type: none"> • CT, including CT angiography 	
<ul style="list-style-type: none"> • MRI, including magnetic resonance angiography 	
<ul style="list-style-type: none"> • vascular imaging, e.g. Doppler ultrasound and catheter angiography 	
<ul style="list-style-type: none"> • functional imaging, e.g. functional MRI and PET 	
<ul style="list-style-type: none"> • myelography 	
Knowledge and Skills	
<ul style="list-style-type: none"> • identify relevant neuroanatomy of brain, spinal cord, and their respective vascular supply • outline the pathological mechanisms which underlie imaging abnormalities • outline the basic principles underlying the various imaging modalities • describe the appearance of a normal brain and spinal cord on neuroimaging techniques, including those listed above • explain the role of each investigation, e.g. when to request it, when to insist on an urgent investigation, what the potential complications are, and what limitations there might be to interpretation • identify abnormalities seen on neuroimaging investigations in the conditions referred to in Domain 2 • describe the limitations of interpretation and the implications for formulating a diagnosis as referred to in Domain 1 • recognise when to question a formal report, when to request further test(s), and when to discuss the results with a neuroradiologist. 	

DOMAIN 3	INVESTIGATIONS
Theme 3.2	Clinical Neurophysiology
Learning Objective 3.2.1	Select, and where appropriate, perform appropriate neurophysiological investigations and interpret results of tests
Clinical Neurophysiology Investigations Include:	
<ul style="list-style-type: none"> • EEG, e.g. standard EEG, sleep-deprived EEG and video EEG 	
<ul style="list-style-type: none"> • NCS, e.g. motor and sensory studies, repetitive nerve stimulation 	
<ul style="list-style-type: none"> • EMG, e.g. needle EMG and single-fibre EMG 	
<ul style="list-style-type: none"> • evoked potentials, e.g. visual, brainstem, and somatosensory evoked potentials 	
<ul style="list-style-type: none"> • vestibular function tests 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe relevant neuroanatomy and neurophysiology of the peripheral nervous system, neuromuscular junction and muscle • outline the basic principles underlying the various clinical neurophysiology modalities • recognise the appearance of normal waveforms on neuroimaging techniques, including those listed above; discuss the importance of variations with age • explain the role of each investigation, e.g. when to request it, when to insist on an urgent investigation, what the potential complications are, and what limitations there might be to interpretation • identify abnormalities seen on clinical neurophysiology investigations in the conditions referred to in Domain 2 • describe the limitations of interpretation and the implications for formulating a diagnosis as referred to in Domain 1 • recognise when to question a formal report, when to request further test(s), and when to discuss the results with a neurophysiologist • perform and correctly report basic NCS, e.g. studies for carpal tunnel syndrome, other common entrapment neuropathies and peripheral neuropathy • note the specific training requirements in neurophysiology which require that by the completion of training the trainee has: <ul style="list-style-type: none"> • reported, under supervision, at least 300 EEGs and at least 250 NCS/EMGs – of which at least 150 must have been performed by the trainee • attended an ANZAN EEG and an EMG course, see related document 'Training in Clinical Neurophysiology' for further information. 	

DOMAIN 3	INVESTIGATIONS
Theme 3.3	Cerebrospinal Fluid
Learning Objective 3.3.1	Perform a LP and interpret the results of the tests
Cerebrospinal Fluid Investigations Include:	
<ul style="list-style-type: none"> • opening pressure 	
<ul style="list-style-type: none"> • basic cerebrospinal fluid (CSF) analysis, e.g. xanthochromia, cell count, protein level, sugar level, cytology, microbiological tests, and immunological tests 	
<ul style="list-style-type: none"> • special tests, e.g. spectrophotometry, oligoclonal bands and 14-3-3 protein 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe relevant neuroanatomy and neurophysiology of CSF, including the pathological mechanisms which underlie abnormalities of pressure and CSF constituents • explain the role of LP, e.g when to request it, when it is contraindicated, when to insist on an urgent investigation, and what limitations there might be to interpretation • obtain informed consent • perform a LP • describe the potential complications of LP, and the management of post-LP symptoms including the role of blood patch in treating post-LP headache • describe the normal ranges of CSF opening pressure and the various laboratory measurements, including those listed above • identify abnormalities seen on LP in the conditions referred to in Domain 2 • describe the limitations of interpretation and the implications for formulating a diagnosis as referred to in Domain 1. 	

DOMAIN 3	INVESTIGATIONS
Theme 3.4	Neuropathology
Learning Objective 3.4.1	Interpret the results of neuropathology investigations
Neuropathology Investigations Include:	
<ul style="list-style-type: none"> • brain biopsy 	
<ul style="list-style-type: none"> • nerve biopsy 	
<ul style="list-style-type: none"> • muscle biopsy 	
<ul style="list-style-type: none"> • temporal artery biopsy 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe relevant neuroanatomy of brain, nerve, and muscle coupled with an understanding of the pathological mechanisms which underlie abnormalities seen on neuropathology • explain the role of neuropathology investigations, e.g. when to request them and what limitations there might be to interpretation • recognise that neuropathology laboratories may have specific requirements for the immediate processing of biopsied tissue. Advise surgeons performing these tests of relevant requirements • outline the potential complications of neuropathology investigations, and the management of these complications • identify abnormalities seen on neuropathology in the conditions referred to in Domain 2 • describe the limitations of interpretation and the implications for formulating a diagnosis as referred to in Domain 1 • request assistance in performing these investigations from neurosurgeons, ophthalmologists, and/or vascular surgeons • note the specific training requirements in neuropathology which require that by the completion of training the trainee has: <ul style="list-style-type: none"> • regularly attended monthly neuropathology sessions • if possible, attended an ANZAN neuropathology course. 	

DOMAIN 3	INVESTIGATIONS
Theme 3.5	Clinical Neuropsychology
Learning Objective 3.5.1	Describe the principles of, and indications for, clinical neuropsychological assessment
Neuropsychological Investigations Include:	
<ul style="list-style-type: none"> • basic cognitive screening, e.g. minimal tests and Montreal Cognitive Assessment 	
<ul style="list-style-type: none"> • formal referral to a neuropsychologist 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe relevant neuroanatomy and cognitive functions of the brain and broadly how the various neuropsychological domains are tested by the neuropsychologist • explain the role of clinical neuropsychology, e.g. when to request this and what limitations there might be to interpretation • identify abnormalities seen on neuropsychological testing in the conditions referred to in Domain 2 • describe the limitations of interpretation and the implications for formulating a diagnosis as referred to in Domain 1 • identify the roles of the neurologist and neuropsychologist in determining a patient's capacity to make decisions. 	

DOMAIN 3	INVESTIGATIONS
Theme 3.6	Neurogenetics
Learning Objective 3.6.1	Describe the principles of, and indications for, genetic testing
Neurogenetic Investigations Include:	
<ul style="list-style-type: none"> • genetic testing, e.g. identification of trinucleotide repeat expansions and mitochondrial DNA deletions 	
<ul style="list-style-type: none"> • formal referral to a neurogeneticist 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe basic genetics and the patterns of inheritance of inherited neurological conditions • access information from neurogenetic databases, such as Online Mendelian Inheritance in Man (OMIM) • outline the basic principles of the techniques used in the neurogenetics laboratories, including limitations there might be in interpretation of the results • recognise the role of the clinical geneticist and when to arrange a formal referral as opposed to performing a genetic test • recognise the importance of pre-test counselling and the potential implications of a positive diagnosis for the patient and his/her family • identify abnormalities seen on neurogenetic testing in appropriate conditions referred to in Domain 2 • describe the limitations of interpretation and the implications for formulating a diagnosis as referred to in Domain 1. 	

DOMAIN 3	INVESTIGATIONS
Theme 3.7	Neuroimmunology
Learning Objective 3.7.1	Describe the principles of, and indications for, neuroimmunological testing
Neuroimmunology Investigations Include:	
<ul style="list-style-type: none"> • autoantibody measurement, e.g. anti-acetylcholine receptor antibodies, anti-aquaporin 4 antibodies, and paraneoplastic antibodies 	
<ul style="list-style-type: none"> • formal referral to a neuroimmunologist 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe basic immunology and the processes involved in the generation of immunologically-mediated neurological conditions • outline the basic principles of the techniques used in the neuroimmunology laboratory, including limitations there might be to interpretation of the results • recognise the role of the neuroimmunologist and when to arrange a formal referral • identify abnormalities seen on neuroimmunological testing in appropriate conditions referred to in Domain 2 • describe the limitations of interpretation and the implications for formulating a diagnosis as referred to in Domain 1. 	

DOMAIN 3	INVESTIGATIONS
Theme 3.8	Other Investigations
Learning Objective 3.8.1	Describe the principles of, and indications for, other specific tests used in neurology
Neuroimmunology Investigations Include:	
<ul style="list-style-type: none"> • cardiac investigations, e.g. electrocardiogram, 24-hour electrocardiogram monitoring and echocardiography 	
<ul style="list-style-type: none"> • lung function tests, e.g. vital capacity and formal lung function tests 	
<ul style="list-style-type: none"> • polysomnography 	
<ul style="list-style-type: none"> • other laboratory tests, e.g. fasting lipid profile, B12 level, acanthocytes, serum angiotensin converting enzyme, urinary porphyrins, and thrombophilia screen 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe the tests involved, how they are performed and what limitations there might be to interpretation of the results • identify abnormalities seen on miscellaneous testing in appropriate conditions referred to in Domain 2 • describe the limitations of interpretation and the implications for formulating a diagnosis as referred to in Domain 1. 	

DOMAIN 4	MANAGEMENT
Theme 4.1	Therapeutics in Neurology
Learning Objective 4.1.1	Select and prescribe appropriate medications in the management of neurological diseases
Therapeutic Interventions Include:	
<ul style="list-style-type: none"> • pharmacological treatment, e.g. drugs used to treat epilepsy, immune disorders, such as MS, dementia, pain, mood, stroke, movement disorders, and headache 	
<ul style="list-style-type: none"> • plasmapheresis 	
<ul style="list-style-type: none"> • devices, e.g. implantable stimulators and baclofen pump 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe basic neuropharmacology of pharmacokinetics, metabolism, pharmacodynamics and drug interactions, along with the potential role of pharmacogenomics. • describe relevant neuroanatomy, neurophysiology and neuropathology, where relevant to devices • identify and explain the various classes of medication and specific drugs used to treat neurological illness, with particular emphasis on indications, principles of safe and rational use, monitoring requirements, common and uncommon, adverse effects and significant potential drug interactions • outline the principles of plasmapheresis, its indications, principles of safe and rational use, monitoring requirements, and common and uncommon adverse effects • identify devices used in the specialist management of neurological diseases, e.g. implantable brain stimulators, their indications, principles of safe and rational use, monitoring requirements, and common and uncommon, adverse effects. 	

DOMAIN 4	MANAGEMENT
Theme 4.2	Neurological Emergencies
Learning Objective 4.2.1	Diagnose and manage neurological emergencies
Neurological Emergencies Include:	
<ul style="list-style-type: none"> • coma/altered conscious state, e.g. status epilepticus 	
<ul style="list-style-type: none"> • infections, e.g. meningitis and encephalitis 	
<ul style="list-style-type: none"> • vascular disease, e.g. acute stroke and GCA 	
<ul style="list-style-type: none"> • rapid onset weakness, e.g. Guillain-Barré syndrome, myasthenia gravis, and MS 	
<ul style="list-style-type: none"> • spinal cord syndromes, e.g. spinal cord infarcts and transverse myelitis 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe the neuroanatomy, neurophysiology, and neuropathology relevant to the various conditions presenting as neurological emergencies • describe the neuroanatomy, neurophysiology, and neuropathology relevant to the various conditions presenting as neurological emergencies • identify and describe the diseases, both common and rare, acute and chronic, which present as neurological emergencies • describe current evidence-based pharmacological therapy, along with potential complications, and other forms of management of the various conditions presenting as emergencies and an ability to instigate appropriate treatment • discuss the prognosis and implications of these disorders, and where necessary, make appropriate EOL decisions • outline the role of the neurosurgeon and the ICU, and when referral is appropriate. 	

DOMAIN 4	MANAGEMENT
Theme 4.3	Neurorehabilitation
Learning Objective 4.3.1	Plan rehabilitation goals appropriately and design and instigate relevant treatment plans
Learning Objective 4.3.2	Liaise with allied health workers as part of a MDT
Neurorehabilitation Options Include:	
<ul style="list-style-type: none"> • referral to specific allied health workers, e.g. physiotherapy, occupational therapy, speech pathology, continence advisors, and social work 	
<ul style="list-style-type: none"> • referral to a rehabilitation unit 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe the principles of recovery from neurological illness and/or injury, including the natural history and neuronal plasticity • formulate a prognosis based on understanding of the natural history of the relevant condition coupled with clinical assessment of the relevant markers for recovery • describe the principles of neurorehabilitation, including indications for referral, goal setting, the techniques employed, and setting realistic outcome expectations • outline the principles of the various allied health disciplines listed above • lead and contribute as a member of a MDT • recognise the role of the rehabilitationist, and when referral is appropriate. 	

DOMAIN 4	MANAGEMENT
Theme 4.4	Neuropsychiatry
Learning Objective 4.4.1	Recognise psychological illness in patients and identify indications for appropriate referral
Neuropsychiatric Conditions Include:	
<ul style="list-style-type: none"> • neuroses and psychoses, e.g. obsessive compulsive disorder, depression, anxiety, hypomania, and schizophrenia 	
<ul style="list-style-type: none"> • somatoform disorders, e.g. conversion disorder and hyperchondriasis 	
<ul style="list-style-type: none"> • personality disorders 	
<ul style="list-style-type: none"> • malingering 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe the relevant neurophysiology, neuropharmacology, and neuropsychiatry • identify and describe diseases, common and rare, acute and chronic, which present as neurological conditions and can be confused with the conditions listed in Domain 2, e.g. weakness due to conversion disorder and non-epileptic seizures • outline the principles of pharmacological and behavioural treatment of neuropsychiatric illnesses • recognise the role of the neuropsychiatrist or liaison psychiatrist, and when referral is appropriate. 	

DOMAIN 4	MANAGEMENT
Theme 4.5	Neurosurgery and Vascular Surgery
Learning Objective 4.5.1	Describe the indications for, and complications of, common neurosurgical and vascular surgery procedures
Surgical Procedures Relevant to Neurology Include:	
<ul style="list-style-type: none"> • brain tumour surgery, e.g. biopsy, debulking, and excision 	
<ul style="list-style-type: none"> • vascular surgery, e.g. aneurysm clipping and coiling and carotid endarterectomy 	
<ul style="list-style-type: none"> • spinal surgery, e.g. laminectomy and microdiscectomy 	
<ul style="list-style-type: none"> • CSF shunting procedures 	
<ul style="list-style-type: none"> • functional neurosurgery, e.g. procedures for epilepsy and movement disorders and deep brain stimulation 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe the relevant neuroanatomy, neurophysiology, and neuropathology • identify and describe the diseases, common and rare, acute and chronic, which may require the involvement of a neurosurgeon • outline the basic principles of the techniques used by neurosurgeons and vascular surgeons along with the potential complications of any procedures involved • recognise the role of the neurosurgeon and vascular surgeon, and when referral is appropriate. 	

DOMAIN 4	MANAGEMENT
Theme 4.6	EOL Issues
Learning Objective 4.6.1	Treat and manage patients with progressive, ultimately fatal, conditions
Conditions Requiring Consideration of EOL Issues Include:	
<ul style="list-style-type: none"> • vascular disorders, e.g. stroke 	
<ul style="list-style-type: none"> • malignancy, e.g. brain tumour 	
<ul style="list-style-type: none"> • degenerative disease, e.g. motor neurone disease 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe the relevant neuroanatomy, neurophysiology, and neuropathology • identify and describe diseases, common and rare, acute and chronic, which may require EOL discussions and/or the involvement of a palliative care physician • discuss EOL issues with patients and/or caregivers and consult with patient and/or caregivers to determine a management plan that prevents suffering at the EOL • manage symptoms, such as pain, anxiety, and dyspnoea at the EOL • outline the basic principles of the techniques used by palliative care physicians along with the potential complications of any procedures involved • recognise the role of the palliative care physician, and when referral is appropriate. 	

DOMAIN 4	MANAGEMENT
Theme 4.7	Pregnancy and Neurological Disease
Learning Objectives 4.7.1	Describe and manage the interaction(s) between neurological disease and the pregnant woman and/or the fetus
Relevant Conditions Include:	
<ul style="list-style-type: none"> • neurological disorders, e.g. cerebral venous sinus thrombosis, management of drugs for epilepsy, and migraine 	
<ul style="list-style-type: none"> • primary obstetric disorders, e.g. eclampsia and epidural anaesthesia 	
<ul style="list-style-type: none"> • obstetric issues, e.g. fertility, teratogenesis, method of delivery, breast feeding, and safety of investigations 	
<ul style="list-style-type: none"> • diseases which may affect the fetus, e.g. myasthenia gravis 	
Knowledge and Skills	
<ul style="list-style-type: none"> • describe the relevant anatomy, physiology, and pharmacology • recognise the impact of neurological disease on fertility, pregnancy, and the post-partum period • outline the potential neurological complications of pregnancy and the impact of drugs, particularly antiepileptic drugs, on pregnancy and vice versa • describe the use of neurological investigations and treatment in pregnancy with particular reference to potential hazards, limitations, and safety issues • describe current evidence-based pharmacological therapy and other forms of management for conditions, including those listed above • discuss the prognosis and implications of the various conditions • collaborate with obstetricians on treatment and management plans. 	

DOMAIN 4	MANAGEMENT
Theme 4.8	Lifestyle Implications of Neurological Disease
Learning Objective 4.8.1	Assess and report on patients' capacity and competence
Relevant Issues Include:	
<ul style="list-style-type: none"> • driving, e.g. fitness to drive 	
<ul style="list-style-type: none"> • capacity to make decision, e.g. the need for power of attorney and guardianship 	
Knowledge and Skills	
<ul style="list-style-type: none"> • outline the relevant regulations, e.g. the state/national driving regulations as applied to neurological conditions • assess fitness to drive • describe the medico-legal issues relating to capacity and competence. 	

ACRONYMS AND INITIALISMS

ANZAN	Australian and New Zealand Association of Neurologists
CSF	cerebrospinal fluid
CT	computed tomography
EDSS	Expanded Disability Status Scale
EEG	electroencephalography
EMG	electromyography
ENT	ear, nose and throat
EOL	end-of-life
GCA	giant cell arteritis
LP	lumbar puncture
MRI	magnetic resonance imaging
MS	multiple sclerosis
NCS	nerve conduction studies
NIHSS	National Institute of Health Stroke Scale
OMIM	Online Mendelian Inheritance in Man
PET	positron emission tomography