

# Rehabilitation Medicine Advanced Training Curriculum

Australasian Faculty of Rehabilitation Medicine







## The Royal Australasian College of Physicians

## Physician Readiness for Expert Practice (PREP) Training Program

**Rehabilitation Medicine Advanced Training Curriculum** 

TO BE USED IN CONJUNCTION WITH:

Basic Training Curricula - Adult Internal Medicine Professional Qualities Curriculum

## ACKNOWLEDGEMENTS

Fellows, trainees and RACP staff have contributed to the development of this curriculum document.

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The following Fellows deserve specific mention for their contribution:

- A/Prof Andrew Cole, FAFRM
- Dr Philip Funnell, FAFRM
- Members of the Special Interest Groups of the Australasian Faculty of Rehabilitation Medicine

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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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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

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

Trainees must complete Basic Training in Adult Medicine to enter this program. Trainees who have entered Advanced Training in Adult Medicine to enter this program. 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.

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.

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**

Rehabilitation medicine is that part of the science of medicine involved with the: prevention and reduction of functional loss, activity limitation and participation restriction arising from impairments; management of disability in physical, psychosocial and vocational dimensions; and improvement of function.

Rehabilitation medicine emphasises maximal restoration of the physical, cognitive, psychosocial and vocational functions of the person, the maintenance of health and the prevention of secondary complications of disability.

Rehabilitation physicians:

- diagnose and assess a person's function associated with injury, illness or chronic conditions, to maximise their independence and improve and maintain quality of life
- provide specialist knowledge and expertise in the prevention, assessment, management and medical supervision of a person with a disability
- evaluate medical, social, emotional, work and recreational aspects of function
- work with children and adults using an evidence-based collaborative approach with other disciplines, having a unique overview of the skills and expertise of other health professionals, to develop a patient-centred, individualised treatment plan in a range of settings including home, public and private hospitals, and community rehabilitation centres and clinics.

#### **CURRICULUM OVERVIEW**

#### **Rehabilitation Medicine - 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 rehabilitation medicine physicians within Australia and New Zealand.

The purpose of Advanced Training is for trainees to build on the cognitive and practical skills acquired during Basic Training. At the completion of the Rehabilitation Medicine Advanced Training Program, trainees should be competent to provide unsupervised comprehensive medical care in rehabilitation medicine at consultant level of practice.

Attaining competency in all aspects of this curriculum is expected to take four years of training. It is expected that all teaching, learning and assessment associated with the Rehabilitation Medicine Advanced Training Curriculum will be undertaken within the context of the physician's everyday clinical practice and will accommodate discipline-specific contexts and practices as required. As such it will need to be implemented within the reality of current workplace and workforce issues and the needs of health service provision.

There may be learning objectives that overlap with or could easily relate to other domains; to avoid repetition however, these have been assigned to only one area. In practice it is anticipated that within the teaching/learning environment the progression of each objective would be explored.

Note: The curricula 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) (which can be found on the College website) 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 Continuing Professional Development (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. It is important, therefore, that they be aligned with and fully integrated into the learning objectives within this curriculum.

Domain 1	Communication		
Theme 1.1	Physician-patient communication		
Theme 1.2	Communicating with a patient's family and/or carers		
Theme 1.3	Communicating with colleagues and broader health care team		
Theme 1.4	Communicating with the broader community		
Domain 2	Quality and safety		
Theme 2.1	Using evidence and information		
Theme 2.2	Safe practice		
Theme 2.3	Identifying, preventing and managing potential harm		
Domain 3	Teaching and learning (Scholar)		
Theme 3.1	Ongoing learning		
Theme 3.2	Research		
Theme 3.3	Educator		
Domain 4	Cultural competency		
Theme 4.1	Ongoing learning		
Domain 5	Ethics		
Theme 5.1	Professional ethics		
Theme 5.2	Personal ethics		
Theme 5.3	Ethics and health law		
Domain 6	Clinical decision making		
Theme 6.1	Clinical decision making		
Domain 7	Leadership and management		
Theme 7.1	Self-management		
Theme 7.2	Leadership and managing others		
Domain 8	Health advocacy		
Theme 8.1	Advocacy for the patient		
Theme 8.2	Individual advocacy		
Theme 8.3	Group advocacy		
Domain 9	The broader context of health		
Theme 9.1	Burden of disease		
Theme 9.2	Determination of health		
Theme 9.3	Prevention and control		
Theme 9.4	Priority population groups		
Theme 9.5	Economics of health		

### 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 Rehabilitation Medicine Advanced Training Program, as defined by this curriculum, it is expected that a new Fellow will have developed the clinical skills and acquired the theoretical knowledge for competent rehabilitation medicine practice. It is expected that a new Fellow will have acquired and will continue to develop competencies that ensure the highest standard of patient care.

These competencies are described as learning objectives with specific knowledge and skills.

Professional competence also demands that a rehabilitation physician holds attitudes congruent with their responsibilities towards patients, families, other health professionals and the community.

These attitudes are:

#### **Patient Focus**

A rehabilitation physician:

- has a positive and constructive attitude to the development of strategies to enable the person with disability and activity limitation or participation restriction to realise their full potential
- recognises the perspective and beliefs of the patient, and endeavours to incorporate the patient's needs and expectations into the plan of care
- is aware of and sensitive to issues of ethnicity, culture, gender and sexuality
- recognises the importance of the family and other carers in supporting the patient, as well as the potential difficulties the family may experience in the care of a family member with a disability.

#### **Professional Role**

A rehabilitation physician:

- behaves with empathy, courtesy, responsibility and accountability towards patients and their families, and towards other health professionals
- understands the extent of their competence and how their role extends the traditional medical role
- recognises and respects the contributions and roles of other medical practitioners in the process of care
- is prepared and willing to promote rehabilitation medicine actively to the medical profession.

#### **Continuing Professional Development**

A rehabilitation physician:

- views competence as a continuing process of education and learning by which he/she ensures that clinical practice is of the highest standard
- is willing to review personal competence openly and regularly, and to improve clinical skills as necessary.

#### **Interdisciplinary Management**

While a rehabilitation physician accepts full and ultimate responsibility for the rehabilitation care of the patient, he/she:

- recognises the appropriateness of interdisciplinary team management, especially in the care of persons with permanent and complex disability
- understands the specific skills of each team member, and develops a close professional relationship with these allied disciplines
- appreciates the synergistic effect of cohesive team management, and strives to support the team in achieving holistic and expert care.

### **Patient Advocacy**

A rehabilitation physician is:

- prepared at all times and to the best of his/her ability to represent and support persons with disability in the achievement and defence of their rights to receive optimal medical and rehabilitation care, and to pursue their chosen lifestyle with independence and dignity
- aware of the full extent of potential disadvantage arising from disability, and is willing to assist persons with disability in achieving their full rights in society, especially with regard to medical care, accommodation, community support, community access, safety, transport, and appropriate political and legal representation.

## **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.

## LEARNING OBJECTIVES TABLES

DOMAIN 1	PHYSICIAN COMPETENCIES		
Theme 1.1	Patient Evaluation		
Learning Objec	Learning Objectives		
1.1.1	Describe the potentially disabling consequences of disease, disorders and injury		
1.1.2	Determine the nature and extent of disability and activity limitation or participation restriction		
1.1.3	Predict the degree of functional improvement that may be achieved with appropriate rehabilitation		
Theme 1.2	Patient Management		
Learning Objec	tives		
1.2.1	Plan and implement a realistic and appropriate rehabilitation program that is problem- oriented, goal-driven, time-limited and directly addresses the needs and expectation of the patient and family		
1.2.2	Describe, use and coordinate assessments and therapies of the interdisciplinary team		
Theme 1.3	Administration and Leadership		
Learning Objectives			
1.3.1	Discuss the global organisation of health services at national and state level, and the impact of government policy on the provision of rehabilitation medicine services and services for people with disabilities		

1.3.2	Discuss ethical and legal issues relevant to rehabilitation service management		
1.3.3	Relate appropriate management principles to effective staff and team management		
1.3.4	Design, implement and monitor service delivery		
1.3.5	Use new trends and technology in health service management		
Theme 1.4	Prevention		
Learning Objec	tives		
1.4.1	Promote preventive strategies with regard to diseases and injuries that may cause significant disability		
Theme 1.5	Continuing Medical Education		
Learning Objec	tives		
1.5.1	Self-evaluate personal professional competence and identify areas requiring further development		
1.5.2	Use appropriate methods and resources to acquire further knowledge and skills		
1.5.3	Educate other health professionals on the principles and practices of rehabilitation medicine		
Theme 1.6	Clinical Research		
Learning Objec	tives		
1.6.1	Apply principles of clinical research		
Theme 1.7	Quality Management		
Learning Objec	tives		
1.7.1	Monitor the quality of processes and outcomes of rehabilitation and undertake quality activities to improve service delivery and clinical management		
DOMAIN 2	CLINICAL SYLLABUSES		
Theme 2.1	Cardiac Disease		
Learning Objectives			
2.1.1	Recall basic knowledge of cardiac disease		
2.1.2	Complete a comprehensive assessment of a patient presenting with cardiac disease and evaluate the potential for rehabilitation		
2.1.3	Formulate a cardiac rehabilitation program		
2.1.4	Provide acute/subacute hospital (phase I) care to a patient with cardiac disease		
2.1.5	Provide post-discharge (phase II) care to a patient with cardiac disease		
2.1.6	Provide maintenance (phase III) care to a patient with cardiac disease		

Theme 2.2	Chronic Pain		
Learning Objec	Learning Objectives		
2.2.1	Recall basic knowledge of chronic pain		
2.2.2	Complete a comprehensive assessment of a patient presenting with chronic pain and determine the potential for rehabilitation		
2.2.3	Formulate a rehabilitation management plan specifying appropriate modalities of assessment and treatment		
2.2.4	Coordinate and review team based interdisciplinary patient management, including the integration of appropriate physical and psychological interventions		
Theme 2.3	Developmental and Intellectual Disability in Adults		
Learning Objec	tives		
2.3.1	Recall basic knowledge of developmental and lifelong intellectual disability which has arisen in childhood		
2.3.2	Complete a comprehensive assessment of an adult with developmental/intellectual disability		
2.3.3	Form a rehabilitation plan in consultation with Persons Responsible and carers who are able to facilitate the patient's participation in the plan		
Theme 2.4	Illness and Injury of the Child and Adolescent		
Learning Objec	tives		
2.4.1	Describe illnesses and injuries that result in disability and activity limitation or participation restriction in childhood and adolescence		
2.4.2	Apply basic principles of rehabilitation management for children and adolescents, considering the importance of social, educational and vocational factors		
Theme 2.5	Illness and Injury in Older People		
Learning Objec	tives		
2.5.1	Outline the basis and management of illness and injury in older people		
2.5.2	Complete a comprehensive patient assessment that identifies disability resulting from illness and/or injury in old age and evaluate the potential for rehabilitation		
2.5.3	Formulate a rehabilitation management plan in consultation with the patient, family and general practitioner		
Theme 2.6	Lower Limb Amputation		
Learning Objectives			
2.6.1	Recall basic knowledge of lower limb amputation		

2.6.2	Complete a comprehensive patient assessment that identifies the type of lower limb amputation and any medical factors relevant to prosthetic rehabilitation	
2.6.3	Prescribe appropriate temporary and definitive prostheses	
2.6.4	Formulate an interdisciplinary rehabilitation management plan including review and coordination of patient care	
Theme 2.7	Lymphoedema and Related Disorders	
Learning Objec	tives	
2.7.1	Recall basic knowledge of lymphoedema and related disorders	
2.7.2	Complete a comprehensive assessment of a patient presenting with lymphoedema or related disorders, and evaluate the potential for rehabilitation	
2.7.3	Formulate a lymphoedema management program	
2.7.4	Provide subacute hospital (phase I) care to a patient with lymphoedema and/or related disorders	
2.7.5	Provide ongoing (phase II) care to a patient with lymphoedema and/or related disorders	
Theme 2.8	Musculoskeletal Medicine	
Learning Objec	tives	
2.8.1	Recall basic anatomy and physiology of the musculoskeletal system	
2.8.2	Complete a comprehensive assessment of a patient presenting with musculoskeletal disease or injury, and evaluate the potential for rehabilitation	
2.8.3	Formulate a rehabilitation management plan specifying appropriate modalities of assessment and treatment	
Theme 2.9	Neurological Disease	
Learning Objec	tives	
2.9.1	Recall basic knowledge of neurological disease	
2.9.2	Complete a comprehensive assessment of a patient with neurological disease and evaluate the potential for rehabilitation	
2.9.3	Formulate a rehabilitation management plan that specifies appropriate modalities of assessment and treatment	
2.9.4	Assess and manage the rehabilitation of a patient with cerebrovascular disease	
2.9.5	Assess and manage the rehabilitation of a patient with multiple sclerosis	
2.9.6	Assess and manage the rehabilitation of a patient with motor neurone disease	
2.9.7	Assess and manage the rehabilitation of a patient with poliomyelitis and post-polio syndrome	

2.9.8	Assess and manage the rehabilitation of a patient with myopathy and neuropathy	
Theme 2.10	Occupational Injury	
Learning Objectives		
2.10.1	Complete a comprehensive evaluation of an injured worker that identifies the nature and severity of injury	
2.10.2	Prescribe rehabilitation treatment for occupational injury	
Theme 2.11	Spinal Cord Injury and Disease	
Learning Objec	tives	
2.11.1	Recall basic knowledge of spinal cord injury and disease	
2.11.2	Complete a comprehensive assessment of a patient with stable spinal cord injury/disease and evaluate potential for rehabilitation	
2.11.3	Formulate a management plan that specifies necessary medical, physical and functional rehabilitation goals and treatments in inpatient, outpatient and community settings	
Theme 2.12	Traumatic Brain Injury	
Learning Objec	tives	
Learning Objec	tives Outline the epidemiology, pathophysiology, prognostication, acute treatment and prevention of traumatic brain injury	
	Outline the epidemiology, pathophysiology, prognostication, acute treatment and prevention	
2.12.1	Outline the epidemiology, pathophysiology, prognostication, acute treatment and prevention of traumatic brain injury Complete a comprehensive assessment of a patient with traumatic brain injury and evaluate	
2.12.1 2.12.2	Outline the epidemiology, pathophysiology, prognostication, acute treatment and prevention of traumatic brain injury Complete a comprehensive assessment of a patient with traumatic brain injury and evaluate the potential for rehabilitation Formulate a management plan that specifies necessary medical, physical and functional	
2.12.1 2.12.2 2.12.3	Outline the epidemiology, pathophysiology, prognostication, acute treatment and prevention of traumatic brain injuryComplete a comprehensive assessment of a patient with traumatic brain injury and evaluate the potential for rehabilitationFormulate a management plan that specifies necessary medical, physical and functional rehabilitation goals and treatments in inpatient, outpatient and community settingsUpper Limb Amputation	
2.12.1 2.12.2 2.12.3 Theme 2.13	Outline the epidemiology, pathophysiology, prognostication, acute treatment and prevention of traumatic brain injuryComplete a comprehensive assessment of a patient with traumatic brain injury and evaluate the potential for rehabilitationFormulate a management plan that specifies necessary medical, physical and functional rehabilitation goals and treatments in inpatient, outpatient and community settingsUpper Limb Amputation	
2.12.1 2.12.2 2.12.3 Theme 2.13 Learning Object	Outline the epidemiology, pathophysiology, prognostication, acute treatment and prevention of traumatic brain injury         Complete a comprehensive assessment of a patient with traumatic brain injury and evaluate the potential for rehabilitation         Formulate a management plan that specifies necessary medical, physical and functional rehabilitation goals and treatments in inpatient, outpatient and community settings         Upper Limb Amputation	
2.12.1 2.12.2 2.12.3 Theme 2.13 Learning Object 2.13.1	Outline the epidemiology, pathophysiology, prognostication, acute treatment and prevention of traumatic brain injury         Complete a comprehensive assessment of a patient with traumatic brain injury and evaluate the potential for rehabilitation         Formulate a management plan that specifies necessary medical, physical and functional rehabilitation goals and treatments in inpatient, outpatient and community settings         Upper Limb Amputation         tives         Recall basic knowledge of upper limb amputation         Complete a comprehensive patient assessment that identifies the type of upper limb	

DOMAIN 1	PHYSICIAN COMPETENCIES
Theme 1.1	Patient Evaluation
Learning Objective 1.1.1	Describe the potentially disabling consequences of disease, disorders and injury

#### Knowledge

• describe epidemiology, pathophysiology, natural history, clinical features and complications of diseases, disorders and injuries that may lead to impairment and significant dysfunction, including but not restricted to:

- cardiac disease
- chronic pain
- illness and injury in the elderly
- musculoskeletal disease and injury
- neurological dysfunction, including:
  - cerebrovascular disease (CVD)
  - multiple sclerosis (MS)
  - motor neurone disease (MND)
  - Guillain-Barre syndrome
  - myopathy and neuropathy
  - Parkinson's disease
- occupational injury
- paediatric disease and trauma
- spinal cord injury (SCI) and disease
- traumatic brain injury (TBI)
- upper limb and lower limb prosthetics.

DOMAIN 1	PHYSICIAN CC	DMPETENCIES
Theme 1.1 Patient Evaluation		
Learning Objective 1.1.2	Determine the na participation restr	ture and extent of disability and activity limitation or iction
Knowledge		Skills
<ul> <li>describe concepts of impairmen limitation and participation restr</li> <li>discuss the influence of medical, psychological, social, educationa vocational, gender and sexuality determination of disability, and f effects on the outcome of rehab</li> <li>describe current tools and syster measurement of impairment, dis limitation or participation restrict</li> </ul>	iction physical, al, ethnic, cultural, issues on the their possible ilitation ms for the sability and activity	<ul> <li>write a comprehensive and relevant patient history using appropriate interview techniques</li> <li>conduct a clinical examination including physical, functional and cognitive assessments</li> <li>order and interpret relevant clinical investigations</li> <li>use and interpret relevant diagnostic investigations, including radiological and electrodiagnostic tests</li> <li>synthesise findings of history, clinical examination and investigations into a statement of the nature and extent of disability and activity limitation or participation restriction experienced by the patient and their family</li> <li>communicate outcome of assessment to the patient and family.</li> </ul>

DOMAIN 1	PHYSICIAN CO	DMPETENCIES
Theme 1.1	Patient Evaluation	
Learning Objective 1.1.3	Predict the degree with appropriate	e of functional improvement that may be achieved rehabilitation
Knowledge		Skills
• describe the potential role and benefit of specific medical and rehabilitation therapies in the assessment and management of disability and activity limitation or participation restriction.		<ul> <li>formulate a rehabilitation management plan relevant to the patient's disability, potential for rehabilitation and available resources for rehabilitation therapy</li> <li>write medical or medico-legal reports to the referring source outlining results of evaluation and recommendations for rehabilitation management.</li> </ul>

D	OMAIN 1	PHYSICIAN CO	OMPETENCIES
Theme 1.2		Patient Managem	ent
Learning Objective 1.2.1		that is problem-or	ent a realistic and appropriate rehabilitation program riented, goal-driven, time-limited and directly eds and expectation of the patient and family
Kr	ıowledge		Skills
•	discuss the role of pharmacolog including potential side-effects, of impairment and disability		<ul> <li>formulate a written rehabilitation care plan that specifies problems and goals, and includes the activities of medical and allied disciplines</li> </ul>
•			<ul> <li>review patient progress in rehabilitation, revising problems and goals as necessary</li> </ul>
•	• describe the role of physical therapeutic modalities in the management of impairment and disability		<ul> <li>apply basic clinical procedures as required</li> <li>use appropriate venues for rehabilitation therapy, including inpatient, outpatient and community based resources</li> </ul>
			<ul> <li>use functional outcome measures in rehabilitation planning and management</li> <li>facilitate ongoing participation of patient and family in the rehabilitation program</li> <li>ensure constructive involvement and support of the family in planning and delivering rehabilitation</li> <li>communicate rehabilitation plan to the patient and family</li> <li>write adequate, timely and legible medical records</li> <li>review patient progress and rehabilitation goals.</li> </ul>

DOMAIN 1	PHYSICIAN COMPETENCIES
Theme 1.2	Patient Management
Learning Objective 1.2.1	Plan and implement a realistic and appropriate rehabilitation program that is problem-oriented, goal-driven, time-limited and directly addresses the needs and expectation of the patient and family
<ul> <li>describe the roles of governmer private organisations and volunt community care and advocacy or disability and activity limitation restriction.</li> </ul>	teer groups in the of persons with

DOMAIN 1	PHYSICIAN CO	
Theme 1.2	Patient Managem	ent
Learning Objective 1.2.2	Describe, use and interdisciplinary te	coordinate assessments and therapies of the eam
Knowledge		Skills
<ul> <li>summarise principles of organisa management of interdisciplinary including use of care plans and of describe the roles and skills of m rehabilitation team, including:         <ul> <li>junior medical staff</li> <li>rehabilitation nurse</li> <li>occupational therapist</li> <li>physiotherapist</li> <li>speech pathologist</li> <li>social worker</li> <li>clinical psychologist</li> <li>vocational counsellor</li> <li>prosthetist/orthotist</li> <li>diversional therapist</li> </ul> </li> </ul>	rehabilitation, critical pathways embers of the	<ul> <li>integrate rehabilitation management into wider framework of patient medical care through liaison and consultation with other medical practitioners</li> <li>communicate with and coordinate activities of the rehabilitation team through regular consultation and liaison</li> <li>identify and manage conflict arising during rehabilitation.</li> </ul>

DOMAIN 1	PHYSICIAN COMPETENCIES	
Theme 1.3	Administration and Leadership	
Learning Objective 1.3.1	Discuss the global organisation of health services at national and state level, and the impact of government policy on the provision of rehabilitation medicine services and services for people with disabilities	
Knowledge		
• discuss the organisation and pol (relevant to state of training) an	licies of health services in Australia or New Zealand at the national, state d local levels	
• interpret reforms to health funding, including acute, subacute and non-acute casemix funding		
• interpret legislation relevant to h	nealth service delivery (in state of training) including but not restricted to:	

- medical practice
- freedom of information
- patient privacy and confidentiality
- guardianship
- mental health
- workers compensation
- third party compensation
- describe the roles of major government and non-government organisations supporting and representing people with disabilities.

DOMAIN 1	PHYSICIAN COMPETENCIES
Theme 1.3	Administration and Leadership
Learning Objective 1.3.2	Discuss ethical and legal issues relevant to rehabilitation service management
Knowledge	

- differentiate ethical and legal issues related to health services management
- discuss social, ethnic and cultural issues affecting health services planning and management
- identify requirements for accreditation of rehabilitation services.

DOMAIN 1	PHYSICIAN CO	
Theme 1.3	Administration and Leadership Relate appropriate management principles to effective staff and team management	
Learning Objective 1.3.3		
Knowledge		Skills
<ul> <li>describe effective management s successful clinician-manager</li> <li>outline management principles p</li> <li>staff selection, training, super counselling</li> <li>job descriptions, performance professional development</li> <li>staff motivation and team but staff motivation and team but</li> <li>successful management of c</li> <li>participation and leadership</li> <li>effective negotiation skills</li> <li>identify basic principles of clinicate budget/resource management.</li> </ul>	pertaining to: ervision and arvision and and ange of meetings	<ul> <li>apply management principles pertaining to:</li> <li>staff motivation and team building</li> <li>change management</li> <li>personal time management</li> <li>demonstrate effective negotiation skills when communicating with colleagues, patients, their families, the medical community and the general community</li> <li>lead an interdisciplinary team</li> <li>participate in team meetings</li> <li>lead team meetings</li> <li>apply effective staff interview techniques</li> <li>demonstrate effective personal skills in the leadership and management of the interdisciplinary rehabilitation team.</li> </ul>

NOTE: Trainees are required to complete the external training module in administration and management of rehabilitation services/quality management.

DOMAIN 1	PHYSICIAN COMPETENCIES	
Theme 1.3	Administration an	d Leadership
Learning Objective 1.3.4	Design, implemer	nt and monitor service delivery
Knowledge		Skills
• outline the principles of new pro and implementation.	ogram development	<ul> <li>plan and write submissions for service development</li> <li>monitor quality of processes and outcomes of rehabilitation</li> <li>design specific quality activities to address identified problems</li> <li>complete quality improvement activities involving interdisciplinary rehabilitation management, demonstrating:</li> <li>identification of key processes in rehabilitation, or identification of a specific problem</li> <li>selection of appropriate methods of assessment</li> </ul>

DOMAIN 1	PHYSICIAN COMPETENCIES	
Theme 1.3	Administration and Leadership	
Learning Objective 1.3.4	Design, implement and monitor service delivery	
		<ul> <li>written conclusions detailing outcomes and recommendations for improving quality of rehabilitation</li> <li>use findings of quality activities to improve service delivery.</li> </ul>

DOMAIN 1	PHYSICIAN COMPETENCIES	
Theme 1.3	Administration and Leadership	
Learning Objective 1.3.5	Use new trends and technology in health service management	
Knowledge		Skills
• explain new initiatives in health service delivery, including health outcomes and customer focus.		<ul> <li>use data and information technology relevant to patient information and service evaluation.</li> </ul>

DOMAIN 1	PHYSICIAN CO	DMPETENCIES
Theme 1.4	Prevention	
Learning Objective 1.4.1	Promote prevention may cause signific	ve strategies with regard to diseases and injuries that cant disability
Knowledge		Skills
<ul> <li>define concepts of primary, secc prevention in the context of reh</li> <li>describe patient factors contribu- injury, including age, sex, fitness</li> <li>describe environmental factors of to illness and injury, including of psychological factors, ethnic and</li> <li>name current major preventive la relevant to rehabilitation medici state level.</li> </ul>	abilitation medicine uting to illness and s and lifestyle contributing ccupation, d cultural issues health programs	<ul> <li>identify and manage individual patient risk factors associated with potentially disabling illness and injury</li> <li>identify and modify environmental factors that may directly contribute to the development of illness and injury</li> <li>promote early and effective rehabilitation to limit the disabling consequences of illness and injury</li> <li>participate in the counselling and education of patients, their families, the medical community and the general community with regard to the prevention of illness and injury, and the importance of early rehabilitation</li> <li>promote the early identification and treatment of disability, including secondary physical and psychological disabilities.</li> </ul>

DOMAIN 1	PHYSICIAN COMPETENCIES	
Theme 1.5	Continuing Medic	cal Education
Learning Objective 1.5.1	Self-evaluate perso requiring further o	onal professional competence and identify areas development
Knowledge		Skills
<ul> <li>identify techniques of effective s</li> <li>describe the Australasian Faculty Medicine requirements for conti education</li> <li>explain current legislation relate of professional standards.</li> </ul>	v of Rehabilitation inuing medical	<ul> <li>analyse personal learning needs</li> <li>choose educational activities relevant to personal needs</li> <li>write and review plans for professional self-evaluation.</li> </ul>

DOMAIN 1	PHYSICIAN COMPETENCIES	
Theme 1.5	Continuing Medical Education	
Learning Objective 1.5.2	Use appropriate methods and resources to acquire further knowledge and skills	
Knowledge		Skills
<ul> <li>interpret methods for self-directed learning</li> <li>identify available information technology related to self-directed learning.</li> </ul>		<ul> <li>document participation in relevant medical education activities.</li> </ul>

DOMAIN 1	PHYSICIAN COMPETENCIES	
Theme 1.5	Continuing Medical Education	
Learning Objective 1.5.3	Educate other health professionals on the principles and practices of rehabilitation medicine	
Knowledge		Skills
describe basic techniques for eff	fective teaching.	• demonstrate effective teaching skills, including the use of audiovisual aids.

DOMAIN 1	PHYSICIAN C	OMPETENCIES		
Theme 1.6	Clinical Research		Clinical Research	1
Learning Objective 1.6.1	Apply principles	of clinical research		
Knowledge		Skills		
<ul> <li>differentiate basic elements of clincluding:         <ul> <li>problem selection</li> <li>research justification</li> <li>literature review</li> <li>formulation of hypothesis</li> <li>study design</li> <li>sample selection</li> <li>instruments for data collection</li> <li>data collection and analysis</li> <li>study conclusions</li> <li>the research report</li> </ul> </li> <li>discuss experimental design, me statistical analysis of published receiversearch</li> <li>interpret statistics for clinical research</li> <li>discuss ethical and legal issues receiversearch.</li> </ul>	on thodology and thabilitation	<ul> <li>evaluate rehabilitation research within an appropriate critical framework</li> <li>plan and write a research proposal demonstrating the essential elements of clinical research.</li> </ul>		

NOTE: trainees are required to complete the external training module in clinical research, including a supervised clinical research project during the second and/or third year of Faculty training.

DOMAIN 1	PHYSICIAN CO	OMPETENCIES
Theme 1.7	Quality Managem	ient
Learning Objective 1.7.1		ty of processes and outcomes of rehabilitation and activities to improve service delivery and clinical
Knowledge		Skills
<ul> <li>classify key processes in rehabilitation management</li> <li>summarise current methods for the continuous evaluation and improvement of quality of medical and interdisciplinary rehabilitation</li> <li>describe techniques of presentation of quality management data.</li> </ul>		<ul> <li>devise appropriate methods of assessment</li> <li>distinguish specific problems with a rehabilitation plan</li> <li>write conclusions detailing outcomes and recommendations for improving quality of rehabilitation</li> <li>organise a quality improvement activity involving interdisciplinary rehabilitation management.</li> </ul>

DOMAIN 2 CLINICAL SYLLABUSES		
Theme 2.1   Cardiac Disease		
Learning Objective 2.1.1	Recall basic knowledge of cardiac disease	
Knowledge		
<ul> <li>recall basic information about:</li> <li>anatomy and physiology of the heart and coronary arteries</li> <li>exercise physiology of the heart and peripheral circulation</li> <li>pathophysiology of ischaemic heart disease, including acute myocardial infarction</li> <li>epidemiology of cardiac disease in Australia/New Zealand:         <ul> <li>aetiology</li> <li>incidence and prevalence</li> </ul> </li> </ul>		

- mortality and morbidity
- community cost.

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.1	Cardiac Disease	
Learning Objective 2.1.2	Complete a comprehensive assessment of a patient presenting with cardiac disease and evaluate the potential for rehabilitation	
Knowledge		Skills
<ul> <li>describe the role of investigations in the evaluation of cardiac disease, including:</li> <li>electrocardiography</li> </ul>		<ul> <li>organise a comprehensive history of cardiac disease and disability, identifying significant events in the development of the disease, current symptoms and</li> </ul>

- electrocardiography
- echocardiography
- coronary angiography
- radionuclide imaging
- exercise testing.

•	undertake comprehensive clinical cardiac
	examination identifying importance signs of
	cardiac dysfunction

management

analyse cardiac investigations such as chest x-ray, ٠ rest- and exercise-electrocardiography, and the result of other imaging techniques in order to determine the degree of cardiac impairment.

disability, risk factors, and detailing present medical

DOMAIN 2	CLINICAL SYL	LABUSES	
Theme 2.1	Cardiac Disease		
Learning Objective 2.1.3 Formulat		a cardiac rehabilitation program	
Knowledge		Skills	
<ul> <li>explain principles of cardiac rehat the diagnosis of cardiac disease:         <ul> <li>beginning during acute hos <i>(phase I)</i></li> <li>continuing through the post <i>(phase II)</i></li> <li>ending with the eventual ph care in the community <i>(phase II)</i></li> <li>ending with the eventual ph care in the community <i>(phase II)</i></li> <li>recall that rehabilitation emphasis of patient care:                 <ol> <li>medical assessment and more factors, cardiac status and fur 2.</li> <li>education of patient and farrenedical management, risk far lifestyle change, and exercises</li></ol></li></ul></li></ul>	pitalisation -discharge phase ase of maintenance ase of maintenance (a III) ises four elements nitoring of risk nctional disability hily with regard to actor modification, of significant ntributing to or and disability wal vocation, with eturn to usual ual avocational I management of ations and side luding: me (ACE) cations of surgical ery rocedures	<ul> <li>write a rehabilitation management plan specifying appropriate techniques of exercise conditioning, functional restoration, psychosocial support, education and vocational settlement</li> <li>identify and manage risk factors for cardiac disease including hypertension, hyperlipidaemia, smoking and diabetes</li> <li>communicate diagnosis and rehabilitation management plan clearly to patient, family, medical practitioners and therapists</li> <li>counsel patient and family with regard to all aspects of rehabilitation management</li> <li>communicate effectively with the referring physician, other medical practitioners, therapists, the patient and family.</li> </ul>	

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.1	Cardiac Disease	
Learning Objective 2.1.4	Provide acute/subacute hospital (phase I) care to a patient with cardiac disease	

#### Skills

- use early rehabilitation evaluation that identifies the aetiology and the degree of impairment of cardiac disease, the presence of minor complications (e.g. fist degree heart block, bundle branch block) and major complications (e.g. ventricular tachycardia and fibrillation, ventricular failure) and current drug therapy
- use early supervised reintroduction of progressive activity involvement in personal care tasks
- use exercise testing: commonly used protocols including the recognition of significant abnormalities, e.g. angina, arrhythmia, S-T segment depression
- apply prescription of safe activity and exercise levels following hospital care such as:
  - energy costs of activity: metabolic equivalent of tasks (METs)
  - New York Heart Association (NYHA) Functional Classification System
- use dietary and nutritional advice based on assessment of:
  - usual dietary patterns
  - body weight and fat
  - lipid profile
  - medication
  - associated medical disorders, e.g. hypertension, diabetes
- evaluate patient's personality and response to cardiac disease and disability, including:
  - high risk personality profiles
  - current life stresses, including financial and marital issues
  - anxiety and depression following acute cardiac illness
  - response of family to patient's illness and disability
- use individual and group education with regard to cardiac disease, the patient's specific disability, the importance of risk factor management and the benefits of exercise and lifestyle change
- use vocational assessment, including evaluation of the physical and psychological demands of work, the patient's present work fitness and clearly stated goals for early return to work.

DOMAIN 2	CLINICAL SYLLABUSES		
Theme 2.1	Cardiac Disease		
Learning Objective 2.1.5	Provide post-discharge (phase II) care to a patient with cardiac disease		
Skills			
• use progressive exercise conditio	ning		
	rcise therapy with regard to activity tolerances, coronary artery disease actor modification and psychological well-being, including:		
by reference to target heart	ation and frequency of continuous aerobic activity and light resistance exercises rate range of clinical status and exercise responses		
organise progressive resumption	of personal and recreational activities, including:		
<ul><li>activity tolerances as predict.</li><li>energy costs of usual daily ad</li></ul>	<ul> <li>techniques of energy conservation and work simplification</li> <li>activity tolerances as predicted by exercise testing</li> <li>energy costs of usual daily activities</li> </ul>		
• support continuing education w	ith regard to:		
	<ul> <li>lifestyle modification</li> <li>physiological benefits of exercise training, including appropriate techniques of warm-up and warm-down, cooling, fluid intake and stretching</li> </ul>		
• support continuing dietary moni	itoring and counselling		
<ul> <li>explain in-depth management of significant psychosocial factors, including:</li> <li>at-risk personality profiles and behaviour patterns</li> <li>stress management</li> <li>treatment of anxiety and depression</li> <li>family/carer counselling</li> </ul>			
• use vocational rehabilitation whe	en appropriate by:		
5 5	ning and employer liaison		

DOMAIN 2 CLINICAL SYLLABUSES			
Theme 2.1	Cardiac Disease		
Learning Objective 2.1.6	Learning Objective 2.1.6         Provide maintenance (phase III) care to a patient with cardiac disease		
Skills			
prescribe appropriate exercise and lifestyle activities			
identify suitable community facilities for maintenance (phase III) care			
• review patient's compliance with previous recommendations as required			
review patient's need for psychological support			

• monitor for progression of cardiac disease and disability.

DOMAIN 2 CLINICAL SYLLABUSES		
Theme 2.2   Chronic Pain		
Learning Objective 2.2.1	2.2.1 Recall basic knowledge of chronic pain	
Knowledge		
• recall basic information about current concepts of the anatomy and physiology of acute and chronic pain, including the influence of psychological and cultural factors		
describe epidemiology of chronic pain:		
• incidence		
• prevalence		
• morbidity		

- morbidity
- common causes
- natural history
- describe the biopsychosocial model of chronic pain and illness.

DOMAIN 2	CLINICAL SYL	LABUSES	
Theme 2.2	Chronic Pain		
Learning Objective 2.2.2		omplete a comprehensive assessment of a patient presenting with pronic pain and determine the potential for rehabilitation	
Knowledge		Skills	
<ul> <li>define pain assessment and the descriptors</li> <li>compare pain assessment tools,</li> <li>pain quality: <ul> <li>Visual Analogue Scale (V</li> <li>McGill Pain Questionnai</li> <li>pain perception - persor perceptions inventory</li> <li>Fear-Avoidance Behaviou (FABQ)</li> </ul> </li> <li>psychological consequences <ul> <li>Illness Behaviour Questio</li> <li>Minnesota Multiphasic Finventory (MMPI)</li> <li>Beck Depression Scale (Finventory (MMPI))</li> <li>Beck Depression (Finventory (MMPI))</li> <li>Beck Depression (Finventory (MMPI))</li> <li>Beck Depression (Finventory (MMPI))</li> <li>Beck Depression (Finventory (MMPI))</li> </ul> </li> </ul>	including (AS) re hal beliefs and ur Questionnaire Personality (BDS) ionnaire (CSQ) (SIP) 36 (SF 36) n Questionnaire Questionnaire S) hents.	<ul> <li>organise a comprehensive history of the patient's pain and disability that identifies:         <ul> <li>nature and duration of pain</li> <li>development of disability</li> <li>relevant psychosocial factors, including past pain problems and family history of pain</li> <li>type and effectiveness of past treatment</li> </ul> </li> <li>evaluate current pain and disability, including description of:         <ul> <li>current pain severity</li> <li>aggravating and relieving factors</li> <li>nature and efficacy of present treatment</li> <li>patient's perception of the nature of pain</li> <li>patient's expectations of future treatment</li> <li>identify common neuromusculoskeletal types of chronic pain:</li> <li>somatic referred pain</li> <li>nerve root and peripheral nerve syndromes, including nerve entrapment</li> <li>stump and phantom pain</li> <li>degenerative and mechanical pain</li> <li>chronic arthritis</li> <li>myofascial pain</li> <li>central pain due to spinal cord and brain damage</li> <li>sympathetic maintained pain</li> <li>chronic pain syndrome, including psychological and behavioural dysfunction</li> </ul> </li> <li>identify cancer pain</li> <li>complete a comprehensive clinical examination that identifies, as far as possible, the anatomical and pathological basis of the patient's pain, including the elucidation of nonorganic signs and the presence of signs of deconditioning</li> <li>request and analyse relevant radiological and electrodiagnostic investigations</li> </ul>	

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.2	Chronic Pain	
Learning Objective 2.2.2	Complete a comprehensive assessment of a patient presenting with chronic pain and determine the potential for rehabilitation	
	<ul> <li>incorporate all available information from history, examination and assessment to formulate a diagnostic statement with regard to the aetiology of pain and disability and potential for rehabilitation management.</li> </ul>	

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.2	Chronic Pain	
Learning Objective 2.2.3		pilitation management plan specifying appropriate ssment and treatment
Knowledge		Skills
<ul> <li>describe physical modalities in particular differentiate the role of the follor management:         <ul> <li>ultrasound</li> <li>short wave diathermy</li> <li>microwave</li> <li>interferential therapy</li> <li>therapeutic heat and cold</li> <li>acupuncture</li> <li>transcutaneous electrical net (TENS)</li> <li>exercise therapy</li> </ul> </li> <li>explain functional restoration the general fitness training</li> <li>ADL retraining</li> </ul>	wing in pain	<ul> <li>write a rehabilitation management plan specifying further medical and rehabilitation treatments in appropriate treatment venues, with particular emphasis on: <ul> <li>the roles of physical therapy</li> <li>psychological interventions</li> <li>appropriate drug therapy</li> <li>functional restoration</li> </ul> </li> <li>apply general principles of malignant pain management, including: <ul> <li>bone metastases</li> <li>nerve compression pain</li> <li>cerebral tumours</li> </ul> </li> <li>use psychological management, including: <ul> <li>assessment of pain behaviour and lifestyle</li> </ul> </li> </ul>
<ul> <li>energy conservation</li> <li>work hardening and vocational resettlement</li> <li>leisure, sport and domestic activities</li> <li>define the indications, contraindications and effectiveness of the following drug interventions for chronic benign pain:</li> <li>drug rationalisation and detoxification</li> <li>placebo response</li> <li>non-narcotic analgesics</li> <li>opioid analgesics</li> </ul>		<ul> <li>cognitive and behavioural strategies behaviour modification</li> <li>stress management</li> <li>relaxation training and hypnosis</li> <li>communicate diagnosis and management plan to</li> </ul>
		<ul> <li>communicate diagnosis and management plan to the patient and family in appropriate terms</li> <li>supervise all aspects of rehabilitation management directly, including medication and progressive functional restoration.</li> </ul>

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.2	Chronic Pain	
Learning Objective 2.2.3	Formulate a rehabilitation management plan specifying appropriate modalities of assessment and treatment	
<ul> <li>psychotropic drugs:         <ul> <li>antidepressants</li> <li>antineuritics</li> <li>major tranquillisers</li> </ul> </li> <li>local anaesthetic and region including fluoroscopic proce</li> <li>epidural and intrathecal ana narcotics</li> <li>sympathetic blocks</li> <li>corticosteroids</li> <li>describe past and present techn management, including:</li> </ul>	edures esthetics and iques of surgical	
<ul> <li>surgical management of chronic pain, past and present techniques including cordotomy, neurectomy and stereotactic procedures</li> <li>dorsal column stimulation and implanted nerve stimulators</li> <li>implanted spinal pumps</li> </ul>		
• describe social contexts of chronic pain, including the role of the family.		

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.2	Chronic Pain	
Learning Objective 2.2.4	Coordinate and review team based interdisciplinary patient management, including the integration of appropriate physical and psychological interventions	
Knowledge		Skills
<ul> <li>describe the role of the pain management team, including:</li> <li>roles of individual disciplines</li> <li>importance of timely interdisciplinary management in appropriate treatment venues.</li> </ul>		• communicate appropriately with referring agency, interdisciplinary team and other health professionals involved in the patient's care.

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.3	Developmental and Intellectual Disability in Adults	
Learning Objective 2.3.1	Recall basic knowledge of developmental and lifelong intellectual disability which has arisen in childhood	

#### Knowledge

- explain definitions of developmental and intellectual disability and levels of intellectual disability
- describe epidemiology of intellectual disability per se and common syndromes specifically e.g. Down syndrome, fragile X
- define genetics and chromosomal disorders as they pertain to intellectual disability
- describe underlying factors in challenging behaviour, particularly self-injuring behaviours
- discuss issues of ageing in people with lifelong disability, such as:
  - sexuality, reproduction
  - exposure to health risks
  - onset of chronic conditions and chronic diseases
  - supporting needs with the development of dementia
- discuss the importance of sensitive transition from paediatric to adult care
- describe support issues in relation to death and dying in people with intellectual disability
- interpret consent and guardianship laws in your state as they relate to adults with intellectual disabilities
- summarise sociology of disability in terms of normalisation, deinstitutionalisation and emerging health policy
- interpret international guidelines with respect to health and health care for people with intellectual disabilities.

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.3	Developmental and Intellectual Disability in Adults	
Learning Objective 2.3.2	Complete a comprehensive assessment of an adult with developmental/intellectual disability	
Knowledge		Skills
<ul> <li>summarise disorders related to neurological immaturity or incomplete development of neural pathways, such as:</li> </ul>		• recognise characteristics of simple psychiatric disorders as they arise in the population with intellectual disability
<ul> <li>epilepsy</li> <li>autistic and other behaviours</li> <li>neuromuscular: spasticity, athetosis, gait ataxia</li> <li>neurointestinal: swallowing and elimination</li> </ul>		<ul> <li>recognise common dysmorphisms</li> <li>make observations on nonverbal indicators of pathology, particularly pain</li> </ul>

- demonstrate ability to relate to people who may have minimal communication expertise
- complete assessment in conjunction with carers who know the patient well
- neuroendocrine: diabetes insipidus, hypothyroidism, hypogonadism

enema (MACE) etc.

• neuro-urological: bladder dysfunction

dysfunction, Helicobacter infection,

Hirschprung's disease, coeliac disease,

procedures: Malone antegrade continence

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.3	Developmental ar	nd Intellectual Disability in Adults
Learning Objective 2.3.2		prehensive assessment of an adult with tellectual disability
Knowledge		Skills
<ul> <li>haematological and immunological: leukaemia, recurrent infections</li> <li>structural: osteogenesis imperfecta, craniosynostoses.</li> </ul>		<ul> <li>optimise conditions for examination and investigation of patients with intellectual disability, e.g. arrangement of special protocols to ensure anaesthesia.</li> </ul>

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.3	Developmental and Intellectual Disability in Adults	
Learning Objective 2.3.3		ion plan in consultation with Persons Responsible re able to facilitate the patient's participation in the
Knowledge		Skills
<ul> <li>describe special needs to consid people with intellectual disability another disabling condition in a cord injury, stroke</li> <li>summarise implications of antiep medications, antipsychotics and people with intellectual disability</li> <li>identify local support systems for disability in government and no settings, both physical and socia relationship support</li> <li>describe management of bowel dysfunction.</li> </ul>	y who develop dult life, e.g. spinal oileptic antidepressants in y r people with n-government al, including human	<ul> <li>provide information in a way that is easy for carers to understand</li> <li>refer patients appropriately</li> <li>network with geneticists, other physicians, surgeons with an interest in developmental disability</li> <li>educate (informally) care support staff and family members</li> <li>communicate regularly with Person(s) Responsible, general practitioner, other medical clinicians, allied health professionals, nurses and carers</li> <li>coordinate case conferencing with patient, clinicians and carers, and review progress with individual health care plans.</li> </ul>

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.4	Illness and Injury of the Child and Adolescent	
Learning Objective 2.4.1	Describe illnesses and injuries that result in disability and activity limitation or participation restriction in childhood and adolescence	

#### Knowledge

- recall general principles of growth and development, with emphasis on the neurological and musculoskeletal systems
- describe epidemiology of paediatric impairment and disability in Australia/New Zealand
- describe aetiology of paediatric impairment and disability, including:
  - genetic, perinatal, developmental and acquired causes
  - incidence and prevalence
  - morbidity and mortality
- describe general features, natural history and disabling effects of the following conditions in children and adolescents:
  - orthopaedic:
    - congenital hip dislocation
    - Perthe's disease
    - slipped femoral epiphysis
    - osteochondritides
    - spinal scoliosis
    - congenital and acquired limb deficiency
    - club foot/pes cavus/pes planus
    - skeletal dysplasias resulting in bony deformity and length discrepancy
  - neurological:
    - cerebral palsy
    - Down syndrome
    - CVD
    - TBI and non-TBI
    - spina bifida
    - poliomyelitis
    - neuromuscular diseases, including muscular dystrophies, progressive spinal muscular trophy, hereditary neuropathies, congenital and metabolic myopathies
    - spinal cord injury
    - sensory impairments, including visual and hearing loss
  - neurological sequelae of skeletal dysplasia
  - acute and chronic joint diseases
  - burns.

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.4	Illness and Injury of the Child and AdolescentApply basic principles of rehabilitation management for children an adolescents, considering the importance of social, educational and vocational factors	
Learning Objective 2.4.2		
Knowledge		Skills
<ul> <li>summarise assessment and reha management of disability and ad participation restriction in children</li> <li>describe psychological adjustment family to disability</li> <li>describe social implications of children</li> <li>describe the role of parents and rehabilitation management.</li> </ul>	ctivity limitation or en and adolescents ent of child and nronic illness and	<ul> <li>write a patient history using appropriate interview techniques with patient and parents</li> <li>conduct a clinical examination including physical, functional and cognitive assessments</li> <li>use and interpret relevant diagnostic investigations, including radiological and electrodiagnostic tests</li> <li>synthesise findings of history, clinical examination and investigations into a statement of the nature and extent of the illness or injury, the disability and activity limitation or participation restriction experienced by the patient</li> <li>evaluate whether referral to a paediatric rehabilitation physician is necessary and viable</li> <li>formulate a rehabilitation management plan relevant to the patient's disability, potential for rehabilitation, and the available resources for rehabilitation therapy</li> <li>use vocational programming of the disabled child when appropriate</li> <li>recognise need for referral for genetic counselling</li> <li>identify appropriate community support services</li> <li>support transitional health care for young people with chronic illness and disability</li> <li>use medico legal evaluation of childhood impairment and disability when required</li> <li>communicate outcome of assessment to the patient, family and schools</li> <li>communicate appropriately with referring agency, interdisciplinary team and other health professionals involved in the patient's care</li> <li>supervise all aspects of rehabilitation management directly, including medication and progressive functional restoration.</li> </ul>
DOMAIN 2 CLINICAL SYLLABUSES		
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Theme 2.5	Illness and Injury in Older People	
Learning Objective 2.5.1	Outline the basis and management of illness and injury in older people	
Knowledge		
<ul> <li>recall principles of the normal ageing process</li> <li>recall changes caused by ageing involving physiology of: <ul> <li>central nervous system</li> <li>peripheral nervous system</li> <li>autonomic nervous system</li> <li>cardiovascular and respiratory systems</li> <li>musculoskeletal system</li> <li>gastrointestinal tract/nutrition</li> <li>renal and urogenital systems</li> <li>sexual function</li> <li>endocrine system</li> <li>special senses: vision, hearing, balance</li> </ul> </li> <li>identify psychology and sociology of ageing: <ul> <li>personality and adjustment</li> <li>cognitive impairment</li> <li>family functioning</li> </ul> </li> <li>recall medical management of the following common problems in the elderly: <ul> <li>musculoskeletal injury, including fractures</li> <li>falls</li> </ul> </li> </ul>		
<ul> <li>iatrogenesis and inappropriate medication use</li> <li>delirium</li> <li>dementia</li> <li>depression</li> <li>pain</li> <li>Parkinson's disease</li> <li>urinary incontinence</li> <li>coronary artery disease and congestive cardiac failure</li> <li>chronic airflow limitation</li> <li>restriction of vision and hearing</li> <li>diabetes</li> <li>osteoporosis</li> <li>leg ulcers</li> <li>loss of functional capacity.</li> </ul>		

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.5	Illness and Injury in Older People Complete a comprehensive patient assessment that identifies disability resulting from illness and/or injury in old age and evaluate the potential for rehabilitation	
Learning Objective 2.5.2		
Knowledge		Skills
<ul> <li>describe epidemiology of disabil</li> <li>summarise the evaluation of con impairments, including:         <ul> <li>arthritis</li> <li>stroke/CVD</li> <li>osteoporosis</li> <li>fractures, especially hip, fore pelvis and ankle</li> <li>Parkinson's disease</li> <li>amputation</li> <li>coronary artery disease and failure</li> <li>chronic airflow limitation</li> <li>deconditioning and frailty</li> </ul> </li> <li>summarise the evaluation of con comorbidities that may impact of management, including:         <ul> <li>delirium and dementia</li> <li>depression</li> <li>wound and skin breakdown</li> <li>sepsis, especially respiratory</li> <li>coronary artery disease, con- failure and chronic airflow lini</li> <li>vision and hearing loss</li> <li>osteoporosis</li> <li>nutritional deficiency</li> <li>incontinence</li> <li>complications arising from he</li> </ul> </li> </ul>	nmon disabling harm, vertebrae, congestive cardiac nmon on rehabilitation and urinary tract gestive cardiac mitation	<ul> <li>write a patient history using appropriate interview techniques with the patient, spouse and carers</li> <li>conduct a clinical examination including physical, functional and cognitive assessments</li> <li>use and interpret relevant diagnostic investigations, including radiological and electrodiagnostic tests</li> <li>synthesise findings of history, clinical examination and investigations into a statement of the nature and extent of the illness or injury, the disability and activity limitation or participation restriction experienced by the patient</li> <li>evaluate the rehabilitation prognosis of older people with significant illness and/or injury</li> <li>prioritise interventions that may be helpful in the rehabilitation of this group of patients.</li> </ul>

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.5	Illness and Injury	in Older People
Learning Objective 2.5.3	Formulate a rehabilitation management plan in consultation with patient, family and general practitioner	
Knowledge		Skills
<ul> <li>differentiate types of rehabilitation older people: <ul> <li>inpatient</li> <li>day hospital or equivalent</li> <li>community</li> <li>residential aged care facility</li> <li>day therapy centre or equival</li> </ul> </li> <li>describe the organisation and preservices, and their linkage with coolder people, such as geriatric mession psychiatry and palliative care</li> <li>identify available community care support services</li> <li>describe the role of the following rehabilitation of older people: <ul> <li>aged care assessment team</li> <li>spouse</li> <li>family</li> <li>health carers</li> <li>general practitioner</li> </ul> </li> <li>describe facilitated hospital discher planning</li> <li>describe facilitated hospital discher planning</li> <li>differentiate types of residential discher planning</li> <li>differentiate types of community other programs, including: <ul> <li>Community Aged Care Pack</li> <li>Extended Aged Care at Hometransitional aged care</li> </ul> </li> <li>explain mental competency and legislation</li> <li>interpret government benefits su</li> <li>Program Of Appliances For IC (PADP)</li> <li>Repatriation Appliances Programination</li> </ul>	e and community a in the barge/discharge arge/discharge arge/discharge care programs, and ages (CACP) te (EACH) guardianship tich as: Disabled People gram (RAP) oordinating uding the	<ul> <li>formulate a rehabilitation management plan relevant to the patient's disability, potential for rehabilitation and the available resources for rehabilitation therapy</li> <li>specify appropriate setting, goals and modalities of treatment</li> <li>interpret the patient's fitness for driving</li> <li>recognise income maintenance issues</li> <li>communicate outcome of assessment to the patient, family and carers</li> <li>communicate appropriately with the referring agency, the interdisciplinary team and other health professionals involved in the patients care</li> <li>directly supervise all aspects of rehabilitation management, including medication and where possible progressive functional restoration</li> <li>review and coordinate rehabilitation management, with emphasis on the medical management of active comorbidities and prevention of further disability</li> <li>communicate effectively with patient, family, general practitioner and other relevant agencies.</li> </ul>

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.5	Illness and Injury in Older People	
Learning Objective 2.5.3		ilitation management plan in consultation with the d general practitioner

DOMAIN 2	CLINICAL SYLLABUSES
Theme 2.6	Lower Limb Amputation
Learning Objective 2.6.1	Recall basic knowledge of lower limb amputation
Knowledge	

- recall the biomechanics of normal gait
- describe epidemiology, aetiology, incidence and prevalence, mortality and morbidity of acquired major limb loss in Australia/New Zealand
- summarise principles involved in running an amputee clinic
- explain overview of artificial limb schemes.

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.6	Lower Limb Amp	utation
Learning Objective 2.6.2		prehensive patient assessment that identifies the o amputation and any medical factors relevant to itation
Knowledge		Skills
<ul> <li>differentiate common technique surgery and levels of lower limb</li> <li>partial foot</li> <li>Syme's/ankle disarticulation</li> <li>transtibial</li> <li>knee disarticulation</li> <li>transfemoral</li> <li>hip disarticulation/hemipelve</li> <li>explain the use of ultrasound stu</li> <li>explain the use of angiography.</li> </ul>	amputation: ectomy	<ul> <li>undertake clinical evaluation of the patient with lower limb amputation, identifying important characteristics of the affected and unaffected limbs, and the patient's general medical condition</li> <li>identify age-related or other impairments of cardiopulmonary function, cognitive state and neuromusculoskeletal function.</li> </ul>

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.6	Lower Limb Amp	utation
Learning Objective 2.6.3	Prescribe appropr	iate temporary and definitive prostheses
Knowledge		Skills
<ul> <li>describe principles of prosthetic including:</li> <li>early fitting and use of temp prosthesis casting of the tem</li> <li>use of the alignment jig</li> <li>promotion of wound healing</li> <li>adaptation or replacement of maturation of stump</li> <li>casting and fabrication of pr</li> <li>prescription of appropriate p components</li> <li>principles of prosthetic align adjustment</li> <li>correct application of prosth</li> <li>training in transfers, standin</li> <li>training in domestic, vocatio recreational skills</li> <li>achieving community reinte</li> <li>safe functional mobility</li> <li>discharge planning</li> <li>post discharge support option</li> </ul>	porary/interim nporary socket g of prosthesis with rosthetic socket prosthetic ament and hesis and liners g and ambulation pnal and gration	<ul> <li>prescribe an appropriate lower limb prosthesis, taking into consideration factors such as level of amputation, condition of stump, age, concurrent medical problems and available resources</li> <li>perform check-out of the prosthesis, including assessment of the amputation stump and analysis of gait.</li> </ul>

DOMAIN 2	CLINICAL SYL	LABUSES	
Theme 2.6	Lower Limb Amp	putation	
Learning Objective 2.6.3	Prescribe approp	iate temporary and definitive prostheses	
Knowledge		Skills	
<ul> <li>safety and accessibility of here</li> <li>including provision of aids/</li> <li>transport and driving</li> <li>work and sport activities</li> </ul>			
<ul> <li>describe components of lower l performed below the knee, incl</li> </ul>	-		
<ul> <li>advantages, disadvantages, contraindications</li> <li>partial foot prostheses</li> <li>Syme prosthesis</li> <li>transtibial prosthesis</li> <li>foot prostheses - types, chaindications, including:         <ul> <li>solid ankle cushioned hesingle axis foot</li> <li>multi axial foot</li> <li>low profile foot</li> <li>energy storing foot</li> <li>hydraulic foot</li> <li>dynamic foot</li> </ul> </li> <li>suprapatellar cuff</li> <li>patella tendon kegel (Pessee suspension)</li> <li>thigh lacer</li> <li>shuttlelock</li> <li>gel suspension sleeve suspension</li> </ul>	racteristics and eel (SACH) foot TK) prosthesis ystems		
<ul> <li>types of transtibial amputee patellar tendon bearing (PT tendon supracondylar (PTK bearing (TSB), thigh corset corset open socket, kneeling</li> <li>types of TTA liners: pelite, k urethane gel liners silicone</li> <li>construction design, exoske endoskeletal</li> <li>alignment principles</li> <li>knee-disarticulation prosthet</li> <li>describe components of the tra limb prosthesis, as above, inclusion</li> </ul>	B), PTS, patella ), total surface slip socket, thigh g prosthesis eather, silicon and eletal and esis nsfemoral lower ding:		
• types, characteristics and in prosthetic knee joints:	dications for		

DOMAIN 2	CLINICAL SYLLABUSES	
heme 2.6	Lower Limb Amputation	
earning Objective 2.6.3	Prescribe appropriate temporary and definitive prostheses	
<ul> <li>single and polycentric a</li> <li>weight-activated stance</li> <li>locking knee joints, mothe 4-bar linkage knee, joints, variable cadence computerised knee join</li> <li>characteristics of above-knee</li> <li>quadrilateral socket</li> <li>suction socket</li> <li>lcelandic-Swedish-New</li> <li>ischial containment soc</li> <li>knee disarticulation soci</li> <li>suspension systems:</li> <li>pelvic band</li> <li>shoulder strap</li> <li>silesian band</li> <li>suction socket</li> <li>roll on silicon sleeve sus shuttlelock</li> <li>urethane liner with vacu system</li> <li>alignment principles</li> <li>describe components and gener of hip disarticulation/transpelvic prostheses, including:</li> <li>Canadian hip disarticulation</li> <li>diagonal socket prosthesis</li> <li>transpelvic prosthesis</li> <li>showering</li> <li>showering</li> <li>work</li> <li>sport and recreation</li> <li>describe common problems and ambulation</li> </ul>	control dular knee joints, hydraulic knee knee joints and the t e sockets: York (ISNY) socket ket pension with pinlock/ num suspension al characteristics and translumbar prosthesis cteristics of including: es of transfemoral and I faults in prosthetic	

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.6	Lower Limb Amp	utation
Learning Objective 2.6.4	Formulate an interdisciplinary rehabilitation management plan including review and coordination of patient care	
Knowledge		Skills
<ul> <li>describe investigations in the maperipheral vascular disease</li> <li>summarise preprosthetic patient</li> <li>explain prescription of therapeur optimise function of both lower</li> <li>describe postoperative patient mincluding:         <ul> <li>care of the surgical wound</li> <li>management of wound infe</li> <li>management of stump oede</li> <li>psychological support follow</li> <li>early resumption of assisted self care activity</li> <li>assessment of potential for p</li> <li>level of amputation and heat</li> <li>limb contractures</li> </ul> </li> <li>differentiate specific goals of processional</li> <li>vocational</li> <li>social</li> <li>summarise principles involved in amputee clinic.</li> </ul>	a management tic exercises to limbs nanagement, ction ema ving limb loss ambulation and prosthetic training ling of wound esthetic training:	<ul> <li>interpret assessment of range of motion, strength and function of affected and unaffected limbs</li> <li>interpret assessment of premorbid domestic, vocational, leisure and psychosocial function</li> <li>interpret causes and management of stump and phantom pain</li> <li>write a rehabilitation management plan specifying further medical and rehabilitation treatments in appropriate treatment venues</li> <li>review and coordinate rehabilitation management</li> <li>communicate effectively with the patient, family, and all members of the rehabilitation team.</li> </ul>

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.7	Lymphoedema and Related Disorders	
Learning Objective 2.7.1	Recall basic knowledge of lymphoedema and related disorders	

## Knowledge

- recall basic information about:
  - anatomy and physiology of the lymphatic system
  - pathophysiology of primary, secondary and infective lymphoedema and associated disorders such as lipoedema, phlebolymphoedema and dependent lymphoedema
- describe epidemiology of lymphoedema in Australia/New Zealand:
  - aetiology
  - incidence and prevalence
  - mortality and morbidity
  - community cost.

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.7	Lymphoedema ar	nd Related Disorders
Learning Objective 2.7.2		prehensive assessment of a patient presenting with related disorders, and evaluate the potential for
Knowledge		Skills
<ul> <li>describe the role of investigation of lymphatic impairment:</li> <li>lymphoscintogram</li> <li>vascular investigations</li> <li>imaging for obstruction.</li> </ul>	is in the evaluation	<ul> <li>take a comprehensive history of the patient's lymphoedema and disability, identifying significant events in the development of the condition, current symptoms and disability, and risk factors</li> <li>undertake comprehensive clinical examination identifying important signs of lymphatic dysfunction</li> <li>analyse investigations such as lymphoscintogram and vascular studies in order to determine the degree of lymphatic impairment</li> <li>identify the nature and severity of primary and secondary lymphoedema and associated disorders and consequent functional disability.</li> </ul>

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.7	Lymphoedema ar	nd Related Disorders
Learning Objective 2.7.3	Formulate a lymp	hoedema management program
Knowledge		Skills
<ul> <li>describe the medical and surgical lymphatic diseases, including:         <ul> <li>indications, contraindication of drugs</li> <li>identification and managem for lymphoedema, including cellulitis</li> </ul> </li> <li>recognise that lymphoedema may following the diagnosis of primal lymphoedema (<i>phase l</i>) is generation an outpatient or ambulatory rehistory rehistory rehistory and the care:         <ul> <li>medical assessment and monitor especially cellulitis</li> </ul> </li> <li>education of patient and family management, risk factor modific change and exercise</li> <li>detection and management of s psychosocial dysfunction contribution from lymphoedema or primary or lymphoedema such as breast care</li> <li>self-management in maintenance</li> </ul>	as and side effects ent of risk factors pobesity and anagement ry or secondary ally undertaken as abilitation (phase II) ises four elements ring of risk factors with regards to cation, lifestyle ignificant buting to or arising cause of secondary ncer or melanoma	<ul> <li>write a rehabilitation management plan specifying appropriate techniques of decongestive massage, bandaging, compression garmenting, exercise, nutrition, psychosocial support, education and vocational re-settlement</li> <li>communicate diagnosis and rehabilitation management plan clearly to the patient, family, medical practitioner and therapists</li> <li>counsel patient and family with regards to all aspects of rehabilitation management</li> <li>review and coordinate patient care during all phases of rehabilitation program</li> <li>communicate effectively with the referring physician, other medical practitioners, therapists, the patient and family.</li> </ul>

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.7	Lymphoedema and Related Disorders	
Learning Objective 2.7.4	Provide subacute hospital (phase I) care to a patient with lymphoedema and/or related disorders	

#### Skills

- use rehabilitation evaluation that identifies aetiology, degree of impairment of lymphatic system and presence of complications, e.g. cellulitis, obesity, dependency
- organise therapy program based on:
  - psychosocial support
  - education
  - skin care
  - exercise
  - elevation
  - management of concomitant medication condition, including pain and discomfort
  - manual lymphatic drainage (decongestive lymphatic therapy)
  - multilayer bandaging
  - exercise in compression
  - prescription of compression hosiery or garments
- relate prescription of exercise
- interpret dietary and nutritional advice based on assessment of:
  - body weight and fat
  - medication
  - associated medical disorders
- evaluate patient's personality and response to lymphoedema, including:
  - current life stresses including financial and marital issues
  - anxiety and depression following post cancer lymphoedema
- interpret response of family to patient's illness and disability
- organise individual and group education regarding:
  - lymphoedema
  - patients specific disability
  - importance of risk factor management
  - benefits of exercise and life style changes
  - apply vocational assessment as required, including evaluation of physical and psychosocial demands of work.

DOMAIN 2	CLINICAL SYLLABUSES
Theme 2.7	Lymphoedema and Related Disorders
Learning Objective 2.7.5	Provide ongoing (phase II) care to a patient with lymphoedema and/ or related disorders

# Skills

- support the patient as necessary by:
  - reviewing compliance with previous recommendations
  - organising psychological support
  - monitoring progression of lymphoedema and disability
- identify suitable facilities for phase II care
- monitor patient's participation in self management, including:
  - self and carer massage exercise
  - compliance in compression garment use.

CLINICAL SYLLABUSES
Musculoskeletal Medicine
Recall basic anatomy and physiology of the musculoskeletal system

• recall basic anatomy and physiology of the musculoskeletal system, including:

- fundamental understanding of the functional anatomy of the spine and limbs
- surface anatomy
- clinical kinesiology
- determinants of normal gait.

DOMAIN 2	CLINICAL SYL	LABUSES	
Theme 2.8	Musculoskeletal Medicine		
Learning Objective 2.8.2	arning Objective 2.8.2 Complete a comprehensive assessment of a patient presenting of musculoskeletal disease or injury, and evaluate the potential for rehabilitation		
Knowledge		Skills	
<ul> <li>summarise aspects of commor diseases and injuries, including</li> </ul>		• take a comprehensive history of the patient's symptoms and disability identifying:	
<ul> <li>aetiology</li> <li>epidemiology</li> <li>pathomechanics and pathorechanics and pathorechanics and pathorechanics and pathorechanics and pathorechanics</li> <li>clinical features, including</li> <li>diagnostic investigations</li> <li>psychosocial issues</li> <li>injury and dysfunction relations</li> <li>sport</li> <li>describe the following diseases</li> </ul>	pain and dysfunction ted to work and	<ul> <li>all causative factors related to the onset and continuation of the patient's condition</li> <li>other medical conditions that may be related to the patient's complaint</li> <li>all aggravating and relieving factors</li> <li>results of previous investigations</li> <li>details of the efficacy of past treatment for the condition</li> <li>patient's perception of the nature of the disability</li> <li>patient's expectations of future treatment</li> </ul>	
<ul> <li>conditions:</li> <li>strain and sprain</li> <li>degenerative disorders of t and peripheral joints</li> <li>subacute fractures</li> <li>subacute and chronic arthredisorders of soft tissues</li> <li>subacute care following sp tendon surgery</li> <li>peripheral nerve injury</li> <li>systemic diseases involving system, including:</li> </ul>	itides inal, joint and	<ul> <li>patient's expectations of future treatment</li> <li>undertake a comprehensive and relevant physical examination identifying anatomical and pathological basis of patient's pain/dysfunction, including:         <ul> <li>appropriate provocation tests</li> <li>identification of abnormal neurological signs, where relevant</li> <li>identification of signs of physical deconditioning</li> <li>analysis of gait in all cases of locomotor dysfunction</li> </ul> </li> </ul>	
<ul> <li>systemic lupus eryther</li> <li>visceral disease presen musculoskeletal pain/c</li> <li>neurological disease in musculoskeletal system</li> <li>osteoporosis and disorders</li> <li>describe assessment of function Theme 2.10 Occupational Inju</li> <li>describe the use and interpreta test, including:</li> <li>plain x-rays</li> </ul>	ting as dysfunction volving the n e.g. MS, MND of bone metabolism nal capacity (see ry)	<ul> <li>identify relevant impairments and disabilities related to the musculoskeletal system</li> <li>select and review appropriate investigations, including: <ul> <li>plain x-rays</li> <li>CT scanning</li> <li>myelography</li> <li>MRI</li> <li>fluoroscopic procedures</li> <li>electrodiagnostics studies</li> </ul> </li> <li>incorporate all information available from history,</li> </ul>	
<ul> <li>CT Scans</li> <li>diagnostic ultrasound</li> <li>MRI</li> <li>myelography</li> <li>discography</li> <li>joint aspiration</li> </ul>		examination, and investigations to make diagr and, where relevant, differential diagnoses.	

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.8	Musculoskeletal Medicine	
Learning Objective 2.8.2	Complete a comprehensive assessment of a patient presenting with musculoskeletal disease or injury, and evaluate the potential for rehabilitation	
<ul> <li>zygoapophyseal joint injecti branch block</li> <li>electrodiagnostic evaluation</li> </ul>		

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.8	.8 Musculoskeletal Medicine	Лedicine
Learning Objective 2.8.3		pilitation management plan specifying appropriate ssment and treatment
Knowledge		Skills
<ul> <li>describe pharmacotherapy, incluside effects and contraindication</li> <li>simple and compound analogin nonsteroidal anti-inflammate</li> <li>opioids</li> <li>antidepressants and antineu</li> <li>topical rubefacients and antireu</li> <li>topical rubefacients and antireu</li> <li>skeletal muscle relaxants</li> <li>antirheumatic medication</li> <li>intra-articular and soft tissue corticosteroid and local anae</li> <li>drugs used in the managem</li> <li>explain therapeutic physical moor physiological effects, effectivene contraindications of:         <ul> <li>local heating and cooling</li> <li>ultrasound</li> <li>interferential therapy</li> <li>short-wave diathermy</li> <li>transcutaneous electrical neuron</li> <li>acupuncture</li> <li>mobilisation and manipulati and spinal joints</li> </ul> </li> </ul>	s, of: gesics ory drugs ritic medication - inflammatory injections of esthetic ent of osteoporosis dalities, ss, indications and	<ul> <li>formulate a rehabilitation management plan based on diagnosis, specifying necessary further medical and other modalities of assessment and treatment</li> <li>undertake basic procedural skills, including but not restricted to: <ul> <li>intra-articular injection of shoulder and knee</li> <li>injection for pain/dysfunction of tendons, ligaments, bursae and entheses</li> <li>trigger point injection</li> </ul> </li> <li>communicate diagnoses and management plans to patients in clear and appropriate terms</li> <li>communicate promptly and appropriately with referring agencies and any other health professionals involved in the care of the patient</li> <li>communicate with patients about prevention of further injury, and strategies for safe return to work, sport and domestic activity</li> <li>review and coordinate patient care</li> <li>communicate effectively with the referring practitioner, therapists and other relevant agencies.</li> </ul>

Theme 2.8	Musculoskeletal Medicine	
Learning Objective 2.8.3	Formulate a rehabilitation management plan specifying appropriate modalities of assessment and treatment	
<ul> <li>describe the role of rest and exer</li> <li>role of rest in treatment of ad illness</li> <li>negative effects of prolonged on musculoskeletal system</li> <li>role of prescribed/structured stretching, strengthening, po</li> <li>principles and techniques of training and functional resto</li> <li>outline the importance of patien active patient participation in:         <ul> <li>exercise</li> <li>task modification</li> <li>drug use</li> <li>injury prevention</li> <li>maintenance of social and oc</li> </ul> </li> <li>describe orthoses and aids, inclu</li> <li>the biomechanical effects of to the musculoskeletal syster</li> <li>rational prescription of aids a in the management of acute musculoskeletal disorders</li> <li>discuss surgical intervention, incl benefits and adverse effects of su in the management of acute and musculoskeletal dysfunction</li> <li>summarise rehabilitation method surgical intervention for spinal in fractured neck of femur, hand inj and after total joint replacement hip, knee and shoulder</li> <li>describe how work, sport and do can cause or perpetuate musculo dysfunction.</li> </ul>	cute injury and d rest and disuse exercise for osture correction general fitness ration t education and ccupational roles ding: orthoses applied n and orthoses and chronic luding indications, irgical intervention d chronic ds following npairment, jury and disease, , especially of the omestic activities	

DOMAIN 2	CLINICAL SYLLABUSES
Theme 2.9	Neurological Disease
Learning Objective 2.9.1	Recall basic knowledge of neurological disease
Knowledge	

• recall basic knowledge of the nature and consequences of neurological disorders that result in major disability and activity limitation or participation restriction.

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.9	Neurological Disease	
Learning Objective 2.9.2	Complete a comprehensive assessment of a patient with neurological disease and evaluate the potential for rehabilitation	
Knowledge		Skills
<ul> <li>describe cognitive/perceptual dyincluding:</li> <li>types of impairment and assidisturbance</li> <li>prevalence</li> <li>assessment tools, including evaluation</li> <li>techniques of management</li> <li>techniques of retraining</li> <li>impact of cognitive/percept functional outcome</li> <li>describe types of bladder dysfunc</li> <li>describe types of bowel dysfunct</li> <li>describe the incidence and type dysfunction</li> <li>describe the incidence and type dysfunction interpret sexual dys</li> <li>describe nutrition problems, inc</li> <li>common swallowing disord</li> <li>clinical assessment of swallo nutritional status, including barium swallow (videofluoro</li> </ul>	sociated psychiatric neuropsychological ual dysfunction on nction tion s of voiding s of sexual function luding: ers wing and the modified pscopy) ers, including types	<ul> <li>write a patient history using appropriate interview techniques with the patient, spouse and carers, including past history of:</li> <li>cardiovascular disease and/or peripheral vascular disease</li> <li>atrial fibrillation</li> <li>diabetes mellitus</li> <li>hyperlipoproteinaemia</li> <li>smoking</li> <li>alcohol use</li> </ul> conduct a clinical examination including physical, functional and cognitive assessments <ul> <li>use and interpret relevant diagnostic investigations including radiological and electrodiagnostic tests</li> <li>synthesise findings of history, clinical examination and investigations into a statement of the nature and extent of the illness or injury, the disability and activity limitation or participation restriction experienced by the patient <ul> <li>evaluate whether referral to other specialists is necessary and viable.</li> </ul></li></ul>

DOMAIN 2	CLINICAL SYLLABUSES
Theme 2.9	Neurological Disease
Learning Objective 2.9.3	Formulate a rehabilitation management plan that specifies appropriate modalities of assessment and treatment
Knowledge	Skills
<ul> <li>describe the rehabilitation manneurological disorders resulting with emphasis on neurological commonly encountered in currincluding:         <ol> <li>CVD</li> <li>MS</li> <li>MND</li> <li>MND</li> <li>myopathy and neuropathy</li> </ol> </li> <li>describe techniques to manage dysfunction:         <ol> <li>fluid management</li> <li>anticholinergic medication</li> <li>intermittent self-catheterisa</li> <li>urethral and suprapubic ca</li> <li>treatment of urinary infecti</li> <li>renal tract monitoring</li> </ol> </li> <li>describe management, inclu         <ol> <li>dietary management, inclu</li> <li>medication, including stoo suppositories</li> </ol> </li> <li>explain pressure area care and pressure sores</li> <li>describe management of voidin including bladder retraining, dicatheterisation</li> <li>interpret sexual dysfunction an management, including counse</li> <li>describe management of nutriti including postural and dietary medical monitoring and indication percutaneous endoscopic gastrifeeding</li> <li>explain management of dysartl weakness and dysphonia, inclu exercises, energy conservation communication aids</li> <li>describe the pathophysiology of syndromes and their management</li> </ul>	<ul> <li>n major disability, onditions</li> <li>n t clinical practice,</li> <li>communicate outcome of assessment to the patient, family and carers</li> <li>communicate appropriately with referring agency, interdisciplinary team and other health professionals involved in the patient's care</li> <li>directly supervise all aspects of rehabilitation management, including medication and where possible progressive functional restoration</li> <li>organise and support possible community reintegration, including: <ul> <li>review and coordinate patient management</li> <li>coursel and educate the patient/family with regard to the ongoing effects of impairment and disability.</li> </ul> </li> <li>g dysfunction, and the advance of a support patient, family and social roles</li> <li>vocational resettlement and assessment of work capacity</li> <li>fitness for driving</li> <li>review and coordinate patient management</li> <li>counsel and educate the patient/family with regard to the ongoing effects of impairment and disability.</li> </ul>

DOMAIN 2	CLINICAL SYL	LABUSES	
Theme 2.9	Neurological Dise	ease	
Learning Objective 2.9.4	<b>Objective 2.9.4</b> Assess and manage the rehabilitation of a patient with cerebrovascular disease		
Knowledge		Skills	
<ul> <li>describe epidemiology, incidence mortality and morbidity of CVD Zealand</li> <li>describe pathogenesis of CVD, s         <ul> <li>thrombotic</li> <li>embolic</li> <li>lacunar</li> <li>haemorrhagic</li> </ul> </li> <li>describe risk factors of CVD related age</li> <li>gender</li> <li>past history of transient isch (TIA)/cerebrovascular accided hypertension</li> <li>explain the role of brain-imaging including CT and MRI scans</li> <li>recognise the role of other diago investigations, including:             <ul> <li>transthoracic and transoeso echocardiography</li> <li>contrast carotid angiograph</li> <li>carotid ultrasonography</li> <li>digital subtraction angiogra</li> <li>positron emission tomograps single photon emission com (SPECT)</li> </ul> </li> <li>explain medical management of thrombolytic therapy         <ul> <li>aspirin</li> <li>dipyridamole</li> <li>anticoagulants (heparin, wa ticlopidine</li> <li>describe surgical management of carotid stenting</li> <li>cortaid stenting</li> <li>coling of arteriovenous mal and aneurysm</li> </ul> </li></ul>	in Australia/New uch as: ted to: aemic attacks ent (CVA) g techniques, nostic phageal y phy why (PET) and puted tomography f acute stroke gement of CVD, d effectiveness of: rfarin) of CVD, including:	<ul> <li>recognise stroke syndromes, including:</li> <li>anterior cerebral artery</li> <li>posterior cerebral artery</li> <li>brain stem</li> <li>interpret stroke rehabilitation outcomes, including recent studies of the effectiveness of inpatient, outpatient and community rehabilitation.</li> </ul>	

DOMAIN 2	CLINICAL SYLLABUSES
Theme 2.9	Neurological Disease
Learning Objective 2.9.4	Assess and manage the rehabilitation of a patient with cerebrovascular disease
<ul> <li>Learning Objective 2.9.4</li> <li>summarise theories of neurologic following acute stroke</li> <li>summarise rehabilitation manage deficit</li> <li>describe therapy for motor defice</li> <li>neurofacilitatory techniques</li> <li>biofeedback</li> <li>functional electrical stimulatie</li> <li>constraint-induced moveme</li> <li>describe therapy for sensory dyst</li> <li>describe therapy for sensory dyst</li> <li>describe therapy for sensory dyst</li> <li>describe causes and management hemiplegic shoulder</li> <li>describe upper limb complication</li> <li>glenohumeral subluxation</li> <li>oedema</li> <li>sympathetic-maintained pain</li> <li>summarise management of upper including:</li> <li>techniques of physical therapering</li> <li>indications for and types of u orthotics</li> <li>pharmacological treatment, diazepam, dantrolene and b</li> <li>chemical neurolysis, including and botulinum toxin</li> <li>surgical treatment, includingering</li> <li>describe management of lower lipse</li> </ul>	disease cal recovery ement of stroke it, including: ion (FES) nt therapy (CIMT) function nt of painful ns, including: n er limb spasticity, py upper limb including aclofen ig phenol, alcohol g management of lbow, wrist and
<ul> <li>including:</li> <li>physical therapy</li> <li>patterns of weakness and ga</li> <li>indications for and types of l orthotics</li> <li>indications for and types of v</li> <li>prescription of manual and p wheelchairs for permanent lo</li> </ul>	lower limb walking aids powered

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.9	Neurological Disease	
Learning Objective 2.9.4	Assess and manage disease	e the rehabilitation of a patient with cerebrovascular
<ul> <li>describe psychiatric complication including adjustment, depression</li> <li>incidence</li> <li>neuroanatomical correlates</li> <li>natural history</li> <li>pharmacological therapy</li> <li>differentiate positive and negative functional recovery.</li> </ul>	n and anxiety:	

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.9	Neurological Dise	ase
Learning Objective 2.9.5	Assess and manage the rehabilitation of a patient with multiple sclerosis	
Knowledge		Skills
<ul> <li>describe epidemiology, incidence geographical distribution, mortal of MS in Australia/New Zealand</li> <li>describe life expectancy, genetic</li> </ul>	lity and morbidity	<ul> <li>interpret diagnostic investigations such as cerebrospinal fluid (CSF) findings, MRI, evoked potentials</li> <li>recognise clinical patterns of MS, including:</li> </ul>
<ul> <li>describe life expectancy, genetic studies in relation to MS</li> <li>describe aetiological theories rela including:         <ul> <li>autoimmune</li> </ul> </li> </ul>		<ul> <li>relapsing-remitting</li> <li>primary progressive</li> <li>secondary progressive</li> <li>benign</li> </ul>
<ul> <li>infectious</li> <li>environmental</li> <li>genetic</li> <li>pathophysiology</li> <li>progressive demyelination, e changes</li> <li>areas of predilection in the b</li> <li>role of blood brain barrier</li> <li>dynamic changes of plaque f</li> <li>immunological factors</li> <li>the role of T cells, cytokines,</li> <li>describe clinical diagnostic criteri including Poser's criteria and defi</li> <li>explain rehabilitation assessment</li> </ul>	rain formation on MRI and B cells ia for MS, inition of an attack	<ul> <li>recognise dysfunction related to MS, including:</li> <li>weakness and fatigue</li> <li>visual disturbance - nystagmus, optic neuritis, ocular palsy</li> <li>ataxia and incoordination</li> <li>disturbance of balance</li> <li>sensory disturbance</li> <li>cognitive, affective and behavioural disorders</li> <li>bladder and bowel dysfunction</li> <li>spasticity</li> <li>dysphagia</li> <li>pain</li> <li>sexual dysfunction</li> <li>tremor</li> </ul>

DOMAIN 2	CLINICAL SYLLABUSES
Гheme 2.9	Neurological Disease
Learning Objective 2.9.5	Assess and manage the rehabilitation of a patient with multiple sclerosis
<ul> <li>summarise medical management chronic MS, including indications of:</li> <li>intravenous and oral corticos</li> <li>IFNB - 1a; IFNB - 1b; copolyn</li> <li>immunosuppressive agents, i methotrexate, azathioprine a cyclophosphamide</li> <li>discuss psychosocial effects of MS family</li> <li>describe factors influencing course</li> <li>pregnancy</li> <li>fatigue and heat</li> <li>stress</li> <li>trauma</li> <li>menopause</li> <li>describe interdisciplinary team m MS</li> <li>summarise assistance and manage self care and mobility:</li> <li>functional retraining</li> <li>task simplification</li> <li>aids/orthotics for mobility an</li> <li>attendant care</li> <li>explain spasticity and MS:</li> <li>identification of nociception</li> <li>physical therapy, including state</li> <li>medication, including diazep dantrolene, nerve and motor intrathecal baclofen and botto</li> <li>define tremor and related use of and medication</li> <li>describe tools for measurement of such as Kurtzke Expanded Disabil (EDSS) and the disability profile</li> <li>describe issues pertaining to com psychological adjustment of MS profile</li> </ul>	<ul> <li>s and effectiveness</li> <li>common symptoms</li> <li>symptomatic, pharmacologic and environmental approaches to management</li> <li>therapeutic exercise to maintain strength, flexibility and functional capacity</li> <li>recognise sensory disturbance and pain related to MS, including physical and drug management of dysaesthetic pain and secondary musculoskeletal pain</li> <li>interpret quality of life evaluation for MS patients.</li> </ul>

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.9	Neurological Disease	
Learning Objective 2.9.5	Assess and manage the rehabilitation of a patient with multiple sclerosis	
<ul> <li>describe vocational and avocation patients, including:         <ul> <li>work fitness</li> <li>driving capacity</li> <li>sport and leisure activities</li> </ul> </li> <li>discuss the role of the MS Societ Society, patient support groups a services</li> <li>explain factors associated with p         <ul> <li>progressive course at onset</li> <li>male sex</li> <li>age greater than 40</li> <li>early cerebellar involvement</li> <li>early multiple system involve</li> </ul> </li> </ul>	y, Royal Blind and community poor prognosis:	

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.9	Neurological Dise	ase
Learning Objective 2.9.6	Assess and manag	ge the rehabilitation of a patient with motor neurone
Knowledge		Skills
<ul> <li>describe epidemiology, incidence mortality and morbidity of MNE Zealand</li> <li>describe aetiology of MND:         <ul> <li>genetic forms</li> <li>viral and immune hypothese</li> <li>clinical associations</li> </ul> </li> <li>define pathophysiology and cur MND</li> <li>explain clinical syndromes of MI         <ul> <li>amyotrophic lateral sclerosis</li> <li>progressive muscular atroph</li> <li>progressive bulbar palsy</li> <li>primary lateral sclerosis</li> </ul> </li> </ul>	D in Australia/New es rent concepts of ND:	<ul> <li>interpret laboratory investigations and electrodiagnostic evaluation</li> <li>differentiate diagnoses and current medical treatment for MND.</li> </ul>

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.9	Neurological Disease Assess and manage the rehabilitation of a patient with motor neurone disease	
Learning Objective 2.9.6		
<ul> <li>explain dysfunction related to M         <ul> <li>axial and appendicular weak</li> <li>fatigue</li> <li>joint contracture</li> <li>limb and bulbar spasticity</li> <li>respiratory insufficiency</li> <li>bulbar involvement:                 <ul></ul></li></ul></li></ul>	ia nent in MND, i therapeutic weakness ck, upper limb and city and contracture tities - the use of d techniques of ik simplification is and prescription c wheelchairs and nent of significant community ess/vocational uport activity if the patient and isye disablement patient support nt of dysphonia and	

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.9	Neurological Disease	
Learning Objective 2.9.6	Assess and manage the rehabilitation of a patient with motor neurone disease	
<ul> <li>assessment and management</li> <li>control of saliva</li> <li>assessment of nutritiona</li> <li>radiological assessment</li> <li>treatment including posimodification</li> <li>indicators for and types including PEG</li> <li>respiratory insufficiency:</li> <li>monitoring of respirator</li> <li>maintenance of chest plation indications for and types including for airways sindications for and types</li> </ul>	al status of swallowing sture and dietary of enteral feeding, ry function hysiotherapy suction	

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.9	Neurological Dise	ase
Learning Objective 2.9.7	Assess and manag and post-polio syn	ge the rehabilitation of a patient with poliomyelitis ndrome
Knowledge		Skills
<ul> <li>define poliomyelitis, including:         <ul> <li>aetiology and pathophysiolo poliomyelitis</li> <li>common features of acute ill</li> <li>mechanisms of recovery from</li> <li>principles of rehabilitation macute/subacute illness</li> <li>late-stage complications of set rehabilitation management of impairments/disabilities</li> </ul> </li> <li>define post-polio syndrome (PPS         <ul> <li>diagnostic criteria for PPS</li> <li>common complaints and AD</li> <li>possible pathophysiological matched to the role of electrodiagnostic</li> </ul> </li> </ul>	ness n acute illness anagement of evere poliomyelitis of chronic stable ), including: )L dysfunction mechanisms	<ul> <li>assess and manage acute/subacute poliomyelitis</li> <li>assess and manage PPS</li> <li>assess and manage chronic stable impairments/ disabilities associated with poliomyelitis and PPS.</li> </ul>

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.9	Neurological Disease	
Learning Objective 2.9.7	Assess and manage the rehabilitation of a patient with poliomyelitis and post-polio syndrome	
<ul> <li>rehabilitation management of problems emphasising:         <ul> <li>weakness/fatigue</li> <li>pain</li> <li>mobility</li> <li>dysphagia</li> <li>respiratory insufficiency</li> <li>and including:                       identification and tr secondary musculos</li>                            orthotic manageme</ul></li>                            mobility aids such a wheelchairs</ul>	reatment of skeletal disorders ent is walking aids and	

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.9	Neurological Dise	ase
Learning Objective 2.9.8	Assess and managed neuropathy	ge the rehabilitation of a patient with myopathy and
Knowledge		Skills
<ul> <li>describe types, pathophysiology, diagnostic features of myopathic disorders, including:</li> <li><u>Myopathy:</u></li> <li>Duchenne muscular dystropp</li> <li>Becker muscular dystrophy</li> <li>myotonic dystrophy and oth disorders</li> <li>facioscapulohumeral dystrop</li> <li>scapuloperoneal myopathies</li> <li>limb girdle syndrome</li> <li>congenital myopathies, inclu disease</li> <li>inflammatory, endocrine and</li> </ul>	and neuropathic hy her myotonic bhy s	<ul> <li>interpret electrodiagnostic findings in primary myopathic and neuropathic disorders.</li> </ul>

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.9	Neurological Disease	
Learning Objective 2.9.8	Assess and manage the rehabilitation of a patient with myopathy and neuropathy	
Neuropathy:         mononeuropathy, plexopath polyneuropathies, with emple         carpal tunnel syndrome         ulnar and radial nerve neurop         mononeuritis multiplex         brachial plexus injury         thoracic outlet syndrome         femoral, sciatic and peroneal         axonal polyneuropathies:         diabetic         alcohol-related         renal failure         rheumatoid arthritis         drugs         demyelinating polyneuropath Guillain-Barre syndrome         summarise rehabilitation managerelated to myopathic and neuropincluding:         principles of therapeutic exercise	hasis on: pathies I neuropathies hies, especially ement of disability pathic disease,	
<ul> <li>principles of therapeutic exellimb weakness and contractuof appropriate aids and orthor functional independence in structure indications for surgical intervormanagement of progressive and entrapment neuropathy</li> <li>assessment of nutrition and i enteral feeding</li> <li>assessment of respiratory impand indications for respirator</li> <li>psychological issues, includir</li> <li>cognitive impairments ir myotonic dystrophies</li> <li>adjustment to chronic ill in childhood and adult comparent of and indications</li> </ul>	Iness and disability	

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.10	Occupational Inj	ury
Learning Objective 2.10.1		prehensive evaluation of an injured worker that cure and severity of injury
Link	Theme 2.7 Musc	uloskeletal Medicine
Knowledge		Skills
<ul> <li>describe epidemiology of occupa disability in Australia/New Zealan</li> <li>types of injury and disability</li> <li>incidence and prevalence</li> <li>morbidity and mortality</li> <li>direct and indirect costs to in community</li> <li>describe the use of current techno assessment of work capacity, inclu- valpar</li> <li>West</li> <li>Baltimore Therapeutic Equipr</li> <li>interpret relevant aspects of local compensation legislation, includin responsibilities of workers and em duties of the rehabilitation physic</li> </ul>	d, including: dustry and ologies for the uding: nent (BTE) workers ng the rights and iployers and the	<ul> <li>write a patient history using appropriate interview techniques</li> <li>conduct a clinical examination including physical, functional and cognitive assessments</li> <li>analyse the interaction between usual work duties and injury</li> <li>analyse current or intended duties with regard to primary and secondary prevention</li> <li>use current technologies for the assessment of work capacity</li> <li>use and interpret relevant diagnostic investigations, including radiological and electrodiagnostic tests</li> <li>synthesise findings of history, clinical examination and investigations into a statement of the nature and extent of injury and disability, activity limitation or participation restriction experienced by the patient.</li> </ul>

DOMAIN 2	CLINICAL SYI	LABUSES
Theme 2.10	Occupational Inj	ury
Learning Objective 2.10.2	Prescribe rehabil	itation treatment for occupational injury
Link	Theme 2.7 Musc	uloskeletal Medicine
Knowledge		Skills
<ul> <li>define the goals of occupational medicine, the nexus with rehabilitation medicine, and the importance of collaboration in workplace injury management</li> </ul>		<ul> <li>formulate a rehabilitation management plan relevant to the patient's disability, potential for rehabilitation, and the available resources for rehabilitation therapy</li> </ul>
<ul> <li>describe general principles of occupational rehabilitation</li> </ul>		<ul> <li>communicate outcome of assessment to the patient</li> </ul>
<ul> <li>define prerequisites for effective workplace rehabilitation</li> <li>summarise principles of on-site work injury management</li> </ul>		• communicate appropriately with the referring agency, the interdisciplinary team and other health professionals involved in the patients care
management		

DOMAIN 2	CLINICAL SYLL	ABUSES
Theme 2.10	Occupational Injur	ry
Learning Objective 2.10.2	Prescribe rehabilita	ation treatment for occupational injury
Link	Theme 2.7 Muscul	loskeletal Medicine
<ul> <li>summarise principles of off-site of rehabilitation</li> <li>describe solutions to obstacles of rehabilitation, including:         <ul> <li>complex interactions between</li> <li>adversarial legal processes</li> <li>delays in provision of rehabilition occupational barriers to early</li> <li>psychosocial factors, includin                 <ul></ul></li></ul></li></ul>	occupational n involved parties tation services return to work	<ul> <li>directly supervise all aspects of rehabilitation management, including medication and where possible progressive functional restoration</li> <li>organise and support possible community reintegration, including: <ul> <li>resumption of family and social roles</li> <li>vocational resettlement: assessment of work capacity</li> <li>fitness for driving</li> </ul> </li> <li>write medical or medico-legal reports to the referring source outlining the: <ul> <li>nature of accident and injury</li> <li>current and future rehabilitation management</li> <li>prognosis for recovery</li> <li>estimation of permanent impairment</li> </ul> </li> <li>review and coordinate medical treatment and workplace rehabilitation management</li> <li>communicate effectively with all parties, including injured worker, employer, therapists, general practitioner and insurance company.</li> </ul>

DOMAIN 2	CLINICAL SYLLABUSES
Theme 2.11	Spinal Cord Injury and Disease
Learning Objective 2.11.1	Recall basic knowledge of spinal cord injury and disease

### Knowledge

- recall anatomy of the spinal column and spinal cord, including blood supply and topography of nerve pathways within the spinal cord
- recall physiology of the spinal cord, including:
  - motor and sensory function, including levels
  - autonomic nervous system
  - micturition
  - erection, seminal emission and ejaculation
  - bowel function
  - heart rate and blood pressure regulation
- recall physiology of bone metabolism
- recall pathophysiology and mechanisms of neuropathic pain

DOMAIN 2	CLINICAL SYLLABUSES		
Theme 2.11	Spinal Cord Injury and Disease		
Learning Objective 2.11.1	Recall basic knowledge of spinal cord injury and disease		
<ul> <li>describe epidemiology of traumatic and nontraumatic SCI in Australia/New Zealand, including:         <ul> <li>aetiology</li> <li>incidence and prevalence</li> <li>mortality and morbidity</li> <li>costs</li> <li>long-term outcomes</li> </ul> </li> <li>define key prevention strategies</li> </ul>			
summarise first aid and retrieval of traumatic SCI patient			
<ul> <li>describe pathophysiology of SCI:</li> <li>spinal shock</li> <li>concussion, contusion and laceration</li> <li>secondary injuries</li> <li>new developments in the physiology of spinal cord regeneration</li> </ul>			
<ul> <li>clinical assessment of recent</li> <li>neurological level and degree modified Frankel classification</li> <li>incomplete spinal cord syndr</li> </ul>	<ul> <li>neurological level and degree of impairment following injury: American Spinal Injury Association (ASIA) and modified Frankel classifications</li> </ul>		

• mechanisms of injury and fracture-dislocation types/classifications.

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.11	Spinal Cord Injur	ry and Disease
Learning Objective 2.11.2		prehensive assessment of a patient with stable spinal se and evaluate potential for rehabilitation
Knowledge		Skills
<ul> <li>describe initial assessment of spin canal compromise</li> <li>summarise assessment and mana permanent dysfunction resulting including:         <ul> <li>assessment of pre-injury perso social support and economic</li> <li>level of injury, functional abili level of independence</li> <li>the neurogenic bladder, inclu</li> <li>suprasacral, infrasacral ar impairment</li> <li>urodynamic assessment</li> <li>prognostic indicators</li> </ul> </li> </ul>	gement of from SCI, onality, lifestyle, circumstances ty and expected iding:	<ul> <li>evaluate activity limitations and participation restrictions resulting from spinal cord injury and diseases from any cause</li> <li>write a patient history using appropriate interview techniques with the patient and family</li> <li>conduct a clinical examination including physical, functional and cognitive assessments</li> <li>use and interpret relevant diagnostic investigations, including radiological and electrodiagnostic tests</li> <li>interpret radiological investigations in acute SCI:         <ul> <li>x-ray</li> <li>CT</li> <li>MRI</li> </ul> </li> </ul>

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.11	Spinal Cord Injur	y and Disease
Learning Objective 2.11.2		prehensive assessment of a patient with stable spinal se and evaluate potential for rehabilitation
<ul> <li>autonomic dysreflexia, include</li> <li>pathophysiology</li> <li>symptoms and signs</li> <li>causes.</li> </ul>	ling:	<ul> <li>synthesise findings of history, clinical examination and investigations into a statement of the nature and extent of the spinal cord disease or injury, the disability and activity limitation or participation restriction experienced by the patient.</li> </ul>

DOMAIN 2	CLINICAL SYI	LLABUSES
Theme 2.11	Spinal Cord Inju	ry and Disease
Learning Objective 2.11.3	physical and fun	nagement plan that specifies necessary medical, ctional rehabilitation goals and treatments in tient and community settings
Knowledge		Skills
<ul> <li>describe initial management of Set</li> <li>principles of operative and new surgical management</li> <li>early medical care, including:         <ul> <li>respiratory insufficiency, indications for mechanical basic principles of non-impressure ventilation</li> <li>hypotension</li> <li>neurogenic bladder and</li> <li>gastrointestinal dysfunction</li> <li>pressure area care</li> <li>temperature control</li> <li>mechanisms of injury and dislocation types/classific</li> <li>deep vein thrombosis (Dembolism (PE) prophylax</li> <li>positioning for preventio</li> <li>contractures summarise repermanent dysfunction reincluding:</li> </ul> </li> <li>methods of bladder manager</li> <li>clean intermittent self-catheterisation</li> <li>reflex voiding and blador training</li> <li>suprapubic catheter/indwelling urethral catheterisation</li> </ul>	on-operative including al ventilation and vasive positive bowel on d fracture- ations VT)/pulmonary is n of contractures management of esulting from SCI, ment:	<ul> <li>formulate a rehabilitation management plan relevant to the patient's disability, potential for rehabilitation, and the available resources for rehabilitation therapy</li> <li>communicate outcome of assessment to the patient and family</li> <li>communicate appropriately with the interdisciplinary team and other health professionals involved in the patients care</li> <li>directly supervise all aspects of rehabilitation management, including medication and where possible progressive functional restoration</li> <li>organise and support possible community reintegration</li> <li>organise medico-legal evaluation and report- writing providing appropriate information about:</li> <li>nature and degree of disability resulting from SCI</li> <li>associated injuries</li> <li>significant complications</li> <li>future needs with regard to rehabilitation management, nursing and attendant care, home modifications and equipment.</li> <li>review and coordinate rehabilitation management including communication with the patient, family, rehabilitation team and other health professionals.</li> </ul>

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.11	Spinal Cord Injur	y and Disease
Learning Objective 2.11.3	physical and fund	agement plan that specifies necessary medical, ctional rehabilitation goals and treatments in ient and community settings
Knowledge		Skills
<ul> <li>drug management         <ul> <li>urinary prophylaxis</li> <li>surgical interventions:</li> <li>external sphincterot</li> <li>urethral stent</li> <li>augmentation cysto</li> <li>urinary diversion</li> </ul> </li> <li>long-term renal tract monitor</li> <li>the neurogenic bowel:         <ul> <li>dietary and drug manage</li> <li>bowel routine</li> </ul> </li> <li>respiratory function in tetrapl</li> <li>pressure area care:         <ul> <li>pressure relief of critical a</li> <li>management of skin breat</li> <li>types of pain and manageme</li> <li>management of spasticity: ph pharmacological and surgical</li> <li>autonomic dysreflexia, includ</li> <li>management</li> </ul> <li>physical therapy, including:         <ul> <li>limb range of motion (RC strengthening</li> <li>sitting balance, transfers,</li> <li>hydrotherapy and fitness</li> </ul> <li>hand therapy and splinting</li> <li>adaptive techniques and assis ADL</li> <li>seating and wheelchair prescent</li> <li>principles of upper limb and loorthotics, including:             <ul> <li>resting splints</li> <li>short and long opponents</li> <li>flexor-hinge orthoses</li> <li>writing splints</li> <li>short and long opponents</li> <li>flexor-hinge orthoses</li> <li>writing splints</li> <li>mobile arm supports</li> <li>gait orthoses, including horthoses (KAFOs) and k</li> <li>orthoses (KAFOs)</li> </ul> </li> </li></li></ul>	plasty ing ement egia reas akdown nt following SCI bysical, treatments ing: DM) and standing and gait tive devices for ription ower limb	<ul> <li>review and coordinate rehabilitation management including communication with the patient, family, rehabilitation team and other health professionals.</li> </ul>

DOMAIN 2	CLINICAL SY	LLABUSES
Theme 2.11	Spinal Cord Inju	iry and Disease
Learning Objective 2.11.3	Formulate a management plan that specifies necessary medical, physical and functional rehabilitation goals and treatments in inpatient, outpatient and community settings	
Knowledge		Skills
<ul> <li>basic principles of functional stimulation such as:         <ul> <li>phrenic nerve pacemake</li> <li>sacral anterior root stim</li> <li>Cleveland upper limb ne</li> <li>FES gait and exercise presexual function and sexuality</li> <li>fertility, reproduction and presychological issues, includi</li> <li>psychological issues, includi</li> <li>psychological reactions</li> <li>theories of adjustment te</li> <li>impact on family</li> <li>psychological and manato promote independer</li> </ul> </li> <li>computer support for recreate environmental control</li> <li>driving assessment, modification</li> <li>leisure and sports activities</li> <li>post-discharge/community</li> <li>patient support organisation</li> <li>leisure and sports activities</li> <li>post-discharge/community</li> <li>patient support organisation</li> <li>leisure and sports activities</li> </ul> <li>post-discharge/community</li> <li>patient support organisation</li> <li>leisure and sports activities</li> <li>community support service</li> <li>describe medical and rehabilitation</li> <li>lets stage complications, incluing</li> <li>syringomyelia,</li> <li>upper limb overuse syndrom</li> <li>hypertension</li> <li>diabetes</li> <li>cardiac disease</li> <li>fractures and joint dislocation</li> <li>explain late-stage surgical intervictional performance such as:</li>	er ulator europrosthesis ograms y regnancy ng: to disablement to disablement to disablity agement strategies nce ation, vocation and ations and ipment care: y care ations vices ion management uding: mes	
<ul><li>fractures and joint dislocation</li><li>explain late-stage surgical interv</li></ul>	rentions to improve legic hand and	

DOMAIN 2	CLINICAL SYI	LABUSES
Theme 2.11	Spinal Cord Inju	ry and Disease
Learning Objective 2.11.3	physical and fun	nagement plan that specifies necessary medical, ctional rehabilitation goals and treatments in tient and community settings
Knowledge		Skills
<ul> <li>explain late-stage surgical interventions to improve functional performance such as:</li> <li>reconstruction of the tetraplegic hand and upper limb</li> <li>emphasising tendon transfer techniques</li> <li>tenodesis and arthrodesis</li> <li>describe organisation of SCI services in Australia/ New Zealand identifying acute, subacute and community-based SCI services in state of training.</li> </ul>		

DOMAIN 2	CLINICAL SYLLABUSES
Theme 2.12	Traumatic Brain Injury
Learning Objective 2.12.1	Outline the epidemiology, pathophysiology, prognostication, acute treatment and prevention of traumatic brain injury

### Knowledge

- describe epidemiology of TBI in Australia/New Zealand, including:
  - definition of TBI
  - aetiology, e.g. motor vehicle accident (MVA), assault, falls, etc.
  - incidence
  - mortality and morbidity
  - costs
  - long-term outcomes
- describe the spectrum of brain injury populations based on age, severity, and aetiology
- describe pathophysiology of TBI, including:
  - primary brain damage
  - secondary brain damage
  - focal injury
  - diffuse axonal injury
- define post traumatic amnesia, including:
  - methods of measurement
  - significance with regard to rehabilitation management and outcome
  - clinical management

OOMAIN 2 CLINICAL SYLLABUSES		
Theme 2.12	Traumatic Brain Injury	
Learning Objective 2.12.1	Outline the epidemiology, pathophysiology, prognostication, acute treatment and prevention of traumatic brain injury	
<ul> <li>summarise dysfunction related to physical:         <ul> <li>weakness, incoordination</li> <li>balance and gait</li> <li>sensory impairment</li> <li>cranial nerve lesions inclu</li> <li>swallowing and nutrition</li> <li>bowel and bladder</li> <li>post-traumatic/concussion</li> </ul> </li> <li>cognitive         <ul> <li>arousal</li> <li>attention</li> <li>memory</li> <li>learning</li> <li>executive function</li> <li>perception, praxis</li> <li>language and communic</li> </ul> </li> <li>behaviour         <ul> <li>disinhibition</li> <li>adynamia and inertia</li> <li>aggression</li> <li>integrative functions</li> <li>mobility</li> <li>self-care</li> <li>domestic/community AD</li> <li>sexuality</li> <li>leisure</li> <li>vocational</li> <li>effects on family system</li> </ul> </li> </ul>	a, spasticity, contractures uding sensory deficits on symptoms/syndrome	
<ul> <li>describe long-term outcome follo</li> <li>vocation and employment</li> <li>interpersonal relationships</li> <li>leisure and recreational activity</li> </ul>	ties.	

DOMAIN 2	CLINICAL SYLI	_ABUSES	
Theme 2.12	Traumatic Brain Injury		
		omprehensive assessment of a patient with traumatic nd evaluate the potential for rehabilitation	
Knowledge		Skills	
<ul> <li>explain neurological evaluation un significance of clinical observation and outcome of TBI, including:</li> <li>Glasgow Coma Scale (GCS)</li> <li>duration of coma</li> <li>intracranial pressure (ICP)</li> <li>brainstem signs e.g. pupillary</li> <li>autonomic disturbances</li> <li>explain assessment of rehabilitation following TBI, including:</li> <li>pre-injury factors: age, psycholintellectual function, drug and</li> <li>injury factors: location and seven other significant injuries</li> <li>post-injury factors: duration of traumatic amnesia (PTA), raised pressure, hypoxia, hypotension</li> <li>describe assessment of disability reincluding:</li> <li>comatose and minimally responses of persistent vegetative stated and brain death: ethical a pertaining to medical card assessment of neurological use of coma scales such a Sensory Stimulation Profil</li> <li>neuropsychological evaluation</li> <li>behavioural disorders, including</li> <li>communication disorders</li> <li>family functioning and adjustres</li> <li>interpersonal relationships</li> <li>substance and alcohol abuse</li> </ul>	reflexes on potential osocial status, d alcohol use verity of injury, f coma and post- ed intracranial on esulting from TBI, onsive patients of coma, e, locked-in state and life support al recovery, e.g. s Western Neuro le (WNSSP) n ng aggression disorders, sturbances	<ul> <li>perform a comprehensive patient assessment that identifies impairment, activity limitation and community participation resulting from TBI</li> <li>evaluate the potential for rehabilitation.</li> </ul>	

DOMAIN 2	CLINICAL SYL	LABUSES	
Theme 2.12	Traumatic Brain I	raumatic Brain Injury	
Learning Objective 2.12.2		prehensive assessment of a patient with traumatic evaluate the potential for rehabilitation	
• differentiate measures of impairment, disability and activity limitation or participation restriction following TBI, such as:			
<ul> <li>global measures:</li> <li>Functional Independence Measure (FIM)</li> <li>Functional Assessment Measure (FAM)</li> <li>Rappaport Disability Rating Scale</li> <li>Glasgow Outcome Scale (GOS)</li> <li>Community Integration Questionnaire (CIQ)</li> <li>Ranchos Los Amigos scale</li> <li>Sydney Psychosocial Reintegration Scale (SPRS)</li> <li>short form health survey 36 (SF 36)</li> </ul>			
<ul> <li>specific measures of cognitive, behavioural and affective disturbance, including:</li> <li>Wechsler Adult Intelligence Scale (WAIS)</li> <li>Wechsler Memory Scale (WMS)</li> <li>Controlled Oral Word Association Test (COWAT)</li> <li>Complex Figure of Rey</li> <li>Beck Depression Inventory (BPI)</li> <li>Agitated Behaviour Scale (ABS)</li> <li>Overt Behaviour Scale (OBS)</li> </ul>			
• describe the minor but significant disability that may occur following a brief period of neurological dysfunction, e.g. loss of consciousness			
<ul> <li>outline controversies related to diagnosis and management of post-concussive symptoms/ syndrome.</li> </ul>			
DOMAIN 2	CLINICAL SYI	LLABUSES	
--	---	--	--
Theme 2.12	Traumatic Brain	Injury	
physical and fur		nagement plan that specifies necessary medical, actional rehabilitation goals and treatments in itient and community settings	
Knowledge		Skills	
<ul> <li>summarise the issues that affect or independence and community resist summarise acute management of principles of early retrieval and retrieval from rural areas</li> <li>acute monitoring in emergen and acute neurosurgical care</li> <li>role of rehabilitation physiciar unit/acute neurosurgical unit</li> <li>role of diagnostic investigation management and prognosis, electroencephalography (EEG emission tomography (PET) a emission computed tomograp other imaging techniques</li> <li>ventilatory support</li> <li>intracranial pressure monitorii</li> <li>role of pharmacotherapy, incl prophylactic anticonvulsant m</li> <li>surgical interventions, includit for intercuspal position (ICP) reraniotomy</li> <li>describe mechanisms of functiona</li> <li>resolution of temporary factor oedema, focal haematoma, hy intracranial pressure</li> <li>modification of neural connect synaptic function, redundancy substitution</li> <li>summarise management of comm complications associated with TBI</li> <li>autonomic dysfunction syndra</li> <li>post traumatic epilepsy</li> <li>hypertonicity and movement</li> <li>post traumatic hydrocephalus</li> <li>heterotopic ossification</li> <li>visual disturbances</li> <li>syndrome of inappropriate an hormone hypersecretion (SIAI insipidus/pituitary dysfunction</li> </ul>	entry after TBI TBI, including: d the difficulty of cy, intensive care in in intensive care ins in e.g. CT, MRI, ), positron nd single photon oby (SPECT), plus ng uding hedication ing indications monitoring and al recovery: rs, e.g. cerebral ypoxia, raised ction and y and functional hon medical , including: ome disorders a and V-P shunting tidiuretic DH)/diabetes	<ul> <li>write a rehabilitation management plan specifying necessary modalities of assessment and treatment in consultation with the patient, family, interdisciplinary team and others such as community service providers, vocational rehabilitation providers etc</li> <li>review and coordinate patient management, involving the patient and family</li> <li>communicate effectively with team members, patient, family and other medical practitioners and agencies involved in the patient's care</li> <li>counsel and educate the patient, family and other relevant stakeholders with regard to the effects and consequences of TBI</li> <li>organise medico-legal assessments and reporting that provide appropriate information detailing the nature and degree of disability resulting from TBI, including the patient's future needs with regard to:         <ul> <li>medical and rehabilitation management</li> <li>attendant care</li> <li>housing</li> <li>assistive devices</li> <li>life expectancy</li> </ul> </li> </ul>	

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.12	Traumatic Brain Injury	
Learning Objective 2.12.3	Formulate a management plan that specifies necessary medical, physical and functional rehabilitation goals and treatments in inpatient, outpatient and community settings	
<ul> <li>aspiration pneumonia</li> <li>deep vein thrombosis</li> <li>psychiatric disorders, e.g. psychiatric disorders, e.g. psychiatric disorders, e.g. psychiatric disorder and post traumatic strescence and post traumatic strescence and post traumatic strescence and processionals</li> <li>consistent team approach and health professionals</li> <li>comatose and minimally response and minimally response and minimally response and minimally response and bladder function, parenteral feeding and gate bowel and bladder function. parenteral feeding and gate bowel and bladder function maintenance of skin, mustification</li> <li>principles of behavioural mane</li> <li>use of drugs in the management</li> <li>cognitive remediation</li> <li>principles of behavioural mane</li> <li>use of drugs in the management</li> <li>cognitive impairment</li> <li>emotional and behavioural mane</li> <li>spasticity</li> <li>prescription of orthotics and verse spasticity</li> <li>prescription of orthotics and verse spasticity</li> <li>prescription of orthotics and verse spasticity</li> <li>prescription disorders</li> <li>family functioning and adjustre</li> <li>interpersonal relationships</li> <li>substance and alcohol abuse</li> <li>explain ways to achieve communitincluding:         <ul> <li>interdisciplinary discharge plate</li> <li>case management</li> <li>retraining domestic and common of daily living</li> <li>leisure activities</li> <li>fitness for driving and driver revocational rehabilitation</li> <li>family/social education and active</li> </ul> </li> </ul>	tress disorder y resulting from d roles of allied onsive patients: , including astrostomy care on scle length and agement ent of: al disturbance walking aids disorders, sturbances ment ity reintegration, munity activities re-training	

DOMAIN 2	CLINICAL SYLLABUSES
Theme 2.12	Traumatic Brain Injury
Learning Objective 2.12.3	Formulate a management plan that specifies necessary medical, physical and functional rehabilitation goals and treatments in inpatient, outpatient and community settings
<ul> <li>practical issues pertaining to:         <ul> <li>accommodation</li> <li>guardianship and financi</li> <li>attendant care</li> <li>community support servit</li> <li>compensation schemes a on patients' rehabilitation</li> <li>other community service with sport, recreation, leis etc</li> </ul> </li> </ul>	al management ices and their impact n s that can assist
<ul> <li>recognise brain injury rehabilitation Australia/New Zealand, including acute, subacute and community state of training.</li> </ul>	knowledge of

DOMAIN 2	CLINICAL SYLLABUSES
Theme 2.13	Upper Limb Amputation
Learning Objective 2.13.1	Recall basic knowledge of upper limb amputation
Knowledge	

- describe epidemiology of major upper limb loss in Australia/New Zealand, including:
  - aetiology
  - incidence and prevalence
  - morbidity and mortality
- summarise surgical principles of upper limb amputation and levels of amputation including:
  - digit(s)
  - thumb
  - partial hand
  - transcarpal
  - wrist disarticulation
  - transradial
  - elbow disarticulation
  - transhumeral
  - shoulder disarticulation
  - forequarter amputation.

DOMAIN 2	CLINICAL SYL	LABUSES
Theme 2.13	Upper Limb Amp	putation
Learning Objective 2.13.2		prehensive patient assessment that identifies the nb amputation and any medical factors relevant to ilitation
Knowledge		Skills
<ul> <li>explain preprosthetic patient management, including:</li> <li>assessment of condition of affected and unaffected limbs, and limb dominance</li> <li>assessment of premorbid domestic, vocational, leisure and psychosocial function.</li> </ul>		<ul> <li>undertake clinical evaluation of the patient with upper limb amputation(s), identifying important characteristics of the affected and unaffected limbs, and the patient's general medical condition</li> <li>identify activity limitations and participation limitations.</li> </ul>

DOMAIN 2	CLINICAL SYLLABUSES	
Theme 2.13	Upper Limb Amputation	
Learning Objective 2.13.3	Prescribe appropriate temporary and definitive prostheses	
Knowledge		Skills

<ul> <li>estimate potential for prosthetic training, including:         <ul> <li>level of amputation</li> <li>surgical wound, limb contractures and general condition of stump and residual limb</li> <li>previous prosthetic use</li> <li>general physical and psychological health</li> <li>specific goals of prosthetic training:                 <ul> <li>cosmetic</li> <li>functional: self-care, vocational, social and leisure</li> <li>describe components of the upper limb prosthesis: types, characteristics and indications, including:</li> <li>partial hand prostheses</li> <li>terminal devices:</li></ul></li></ul></li></ul>		
	<ul> <li>level of amputation</li> <li>surgical wound, limb contractures and general condition of stump and residual limb</li> <li>previous prosthetic use</li> <li>general physical and psychological health</li> <li>specific goals of prosthetic training: <ul> <li>cosmetic</li> <li>functional: self-care, vocational, social and leisure</li> </ul> </li> <li>describe components of the upper limb prosthesis: types, characteristics and indications, including: <ul> <li>partial hand prostheses</li> <li>terminal devices: <ul> <li>prosthetic hands: active/cosmetic</li> <li>voluntary opening/closing devices</li> <li>hooks</li> </ul> </li> <li>wrist units: <ul> <li>locking wrists</li> <li>friction wrists</li> </ul> </li> <li>below elbow socket: <ul> <li>Muenster socket</li> <li>ICEROSS socket</li> </ul> </li> </ul></li></ul>	<ul> <li>limitations</li> <li>prescribe an appropriate upper limb prosthesis/ prostheses, taking into consideration factors such as level of amputation, condition of stump and residual limb, concurrent medical problems, the patient's expectations of prosthetic use, and available resources</li> <li>perform check-out of the prosthesis/prostheses, including assessment of the stump and residual</li> </ul>

### DOMAIN 2

### **CLINICAL SYLLABUSES**

### Theme 2.13

### **Upper Limb Amputation**

### Learning Objective 2.13.3

### Prescribe appropriate temporary and definitive prostheses

- below elbow hinges:
  - rigid
  - step-up
  - flexible
  - cuffs and pads
- below-elbow harness and controls:
  - figure-eight harness
  - figure-nine harness
  - chest-strap harness with shoulder saddle
  - Bowden and dual (fair-lead) control systems
- elbow units:
  - control and locking
  - external and internal
- above-elbow harness and controls:
  - as above, including elbow lock cable
- sockets, flexible:
  - ICEROSS
  - suction
  - eryflex
- shoulder prosthesis:
  - socket design
  - harness and control cables, and common control motions: use of the excursion amplifier, axilla loop and shoulder sling with axilla loop
- endoskeletal prostheses
- basic design features, prescription and use of myoelectric prosthetic limbs.

DOMAIN 2	CLINICAL SYI	LABUSES
Theme 2.13	Upper Limb Amp	outation
Learning Objective 2.13.4	Formulate an interdisciplinary rehabilitation management plan including review and coordination of patient care	
Knowledge		Skills
<ul> <li>explain postoperative patient marincluding:         <ul> <li>care of the surgical wound</li> <li>management of stump oeder techniques</li> <li>prevention of limb contracture</li> <li>the use of rigid dressings</li> </ul> </li> <li>explain causes and management phantom pain</li> <li>describe principles of interdisciplin management, including:         <ul> <li>maintenance of strength and limb</li> <li>treatment of associated injurie</li> <li>training for change of domina one-handed activities</li> <li>assistance in coping with loss, image and change in life roles</li> <li>early fitting and training with prosthesis</li> <li>monitoring of wound and ress</li> <li>appropriate timing of definitive</li> <li>techniques of casting and fab prosthetic socket</li> <li>prescription of appropriate procomponents</li> <li>prosthetic training, includings:</li></ul></li></ul>	na: bandaging es and weakness of stump and nary rehabilitation ROM of residual es ance and , altered body , altered body , an interim idual limb ve prosthesis rication of rosthetic and harness ration tivities eral amputee prosthesis nity reintegration, as in home luding vocational	<ul> <li>interpret assessment of ROM, strength and function of affected and unaffected limbs</li> <li>interpret assessment of premorbid domestic, vocational, leisure and psychosocial function</li> <li>interpret causes and management of stump and phantom pain</li> <li>write a rehabilitation management plan specifying further medical and rehabilitation treatments in appropriate treatment venues</li> <li>review and coordinate rehabilitation management</li> <li>communicate effectively with the patient, family, and all members of the rehabilitation team.</li> </ul>

ACRONYMS AND INIT	TIALISMS
ABS	agitated behaviour scale
ACE	angiotensin-converting enzyme
ADL	activity of daily living
AFRM	Australasian Faculty of Rehabilitation Medicine
ASIA	American Spinal Injury Association
AVM	arteriovenous malformation
BDS	Beck depression scale
BPI	Beck depression inventory
ВТЕ	Baltimore therapeutic equipment
САСР	community aged care packages
СІМТ	constraint-induced movement therapy
CIQ	community integration questionnaire
COWAT	controlled oral word association test
CPD	continuing professional development
CSF	cerebrospinal fluid
CSQ	coping strategies questionnaire
CVA	cerebrovascular accident
CVD	cerebrovascular disease
DVT	deep vein thrombosis
EACH	extended aged care at home
ECG	electrocardiogram
EDSS	expanded disability status scale
EEG	electroencephalography
EKG	electrocardiography
EPC	enhanced primary care
FABQ	fear-avoidance behaviour questionnaire
FAM	functional assessment measure
FES	functional electrical stimulation

FIM	functional independence measure
GCS	Glasgow coma scale
GOS	Glasgow outcome scale
НКАГО	hip-knee-ankle-foot orthoses
ІСР	intercuspal position
ICP	intracranial pressure
ISNY	Icelandic-Swedish-New York
КАГО	knee-ankle-foot orthoses
MACE	Malone antegrade continence enema
MET	metabolic equivalent of task
MMPI	Minnesota Multiphasic Personality Inventory
MND	motor neurone disease
MS	multiple sclerosis
MVA	motor vehicle accident
NYHA	New York Heart Association
OBS	overt behaviour scale
PADP	Program of Appliances for Disabled People
PE	pulmonary embolism
PEG	percutaneous endoscopic gastrostomy
PET	positron emission tomography
PPS	post-polio syndrome
PQC	Professional Qualities Curriculum
РТА	post-traumatic amnesia
РТВ	patellar tendon bearing
ртк	patella tendon kegel
PTS	patella tendon supracondylar
RAP	Repatriation Appliances Program
ROM	range of motion
SACH	solid ankle cushioned heel

SCIspinal cord injurySF 36short form health survey 36SFSspinal function sortSIADHsyndrome of inappropriate antidiuretic hormone hypersecretionSIPsickness impact profileSLEsystemic lupus erythematosusSPECTsingle photon emission computed tomographySPRSSydney Psychosocial Reintegration ScaleTBItraumatic brain injuryTENStranscutaneous electrical nerve stimulationTIAtotal surface bearingTTAtotal surface bearingWAISWechsler adult intelligence scaleWMSWechsler memory scale		
SFSspinal function sortSIADHsyndrome of inappropriate antidiuretic hormone hypersecretionSIPsickness impact profileSLEsystemic lupus erythematosusSPECTsingle photon emission computed tomographySPRSSydney Psychosocial Reintegration ScaleTBItraumatic brain injuryTENStranscutaneous electrical nerve stimulationTIAtranscutaneous electrical nerve stimulationTTAtotal surface bearingTVASvisual analogue scaleWAISWechsler memory scale	SCI	spinal cord injury
SIADHsyndrome of inappropriate antidiuretic hormone hypersecretionSIPsickness impact profileSLEsystemic lupus erythematosusSPECTsingle photon emission computed tomographySPRSSydney Psychosocial Reintegration ScaleTBItraumatic brain injuryTENStranscutaneous electrical nerve stimulationTIAtransient ischaemic attacksTSBtotal surface bearingVASvisual analogue scaleWAISWechsler adult intelligence scaleWMSWechsler memory scale	SF 36	short form health survey 36
SIPickness impact profileSLEsystemic lupus erythematosusSPECTsingle photon emission computed tomographySPRSSydney Psychosocial Reintegration ScaleTBItraumatic brain injuryTENStranscutaneous electrical nerve stimulationTIAtransient ischaemic attacksTSBtotal surface bearingTTAvisual analogue scaleWAISWechsler adult intelligence scaleWMSWechsler memory scale	SFS	spinal function sort
SLEsystemic lupus erythematosusSPECTsingle photon emission computed tomographySPRSSydney Psychosocial Reintegration ScaleTBItraumatic brain injuryTENStranscutaneous electrical nerve stimulationTIAtransient ischaemic attacksTSBtotal surface bearingTTAvisual analogue scaleWAISWechsler adult intelligence scaleWMSwechsler memory scale	SIADH	syndrome of inappropriate antidiuretic hormone hypersecretion
SPECTsingle photon emission computed tomographySPRSSydney Psychosocial Reintegration ScaleTBItraumatic brain injuryTENStranscutaneous electrical nerve stimulationTIAtransient ischaemic attacksTSBtotal surface bearingTTAtranstibial amputeeVASvisual analogue scaleWAISWechsler adult intelligence scaleWMSWechsler memory scale	SIP	sickness impact profile
SPRSSydney Psychosocial Reintegration ScaleTBItraumatic brain injuryTENStranscutaneous electrical nerve stimulationTIAtransient ischaemic attacksTSBtotal surface bearingTTAtranstibial amputeeVASvisual analogue scaleWAISWechsler adult intelligence scaleWMSWechsler memory scale	SLE	systemic lupus erythematosus
TBItraumatic brain injuryTENStranscutaneous electrical nerve stimulationTIAtransient ischaemic attacksTSBtotal surface bearingTTAtranstibial amputeeVASvisual analogue scaleWAISWechsler adult intelligence scaleWMSVechsler memory scale	SPECT	single photon emission computed tomography
TENStranscutaneous electrical nerve stimulationTIAtransient ischaemic attacksTSBtotal surface bearingTTAtranstibial amputeeVASvisual analogue scaleWAISWechsler adult intelligence scaleWMSWechsler memory scale	SPRS	Sydney Psychosocial Reintegration Scale
TIA       transient ischaemic attacks         TSB       total surface bearing         TTA       transtibial amputee         VAS       visual analogue scale         WAIS       Wechsler adult intelligence scale         WMS       Wechsler memory scale	ТВІ	traumatic brain injury
TSBtotal surface bearingTTAtranstibial amputeeVASvisual analogue scaleWAISWechsler adult intelligence scaleWMSWechsler memory scale	TENS	transcutaneous electrical nerve stimulation
TTA       transtibial amputee         VAS       visual analogue scale         WAIS       Wechsler adult intelligence scale         WMS       Wechsler memory scale	ΤΙΑ	transient ischaemic attacks
VAS     visual analogue scale       WAIS     Wechsler adult intelligence scale       WMS     Wechsler memory scale	TSB	total surface bearing
WAIS     Wechsler adult intelligence scale       WMS     Wechsler memory scale	ТТА	transtibial amputee
WMS     Wechsler memory scale	VAS	visual analogue scale
	WAIS	Wechsler adult intelligence scale
	WMS	Wechsler memory scale
western neuro sensory stimulation profile	WNSSP	Western neuro sensory stimulation profile

# SUGGESTED LEARNING RESOURCES

### **Cardiac Disease**

#### Texts

- AACVPR cardiac rehabilitation resource manual: promoting health and preventing disease. American Association of Cardiovascular and Pulmonary Rehabilitation. Champaign, IL: Human Kinetics, 2006 (Companion volume to Guidelines for cardiac rehabilitation and secondary prevention programs c2004)
- Cardiac Rehabilitation, Ed William E Kraus and Steven J Keteylan. Toyowa, N J: Humana 2007
- Guidelines for cardiac rehabilitation and secondary prevention programs. American Association of Cardiovascular and Pulmonary Rehabilitation Champaign, IL: Human Kinetics, c2004

#### Journal

• Journal of Cardiopulmonary Rehabilitation and Prevention

### Websites

- AACVPR Consensus statement. Outcomes in cardiac rehabilitation/secondary prevention programs. Improving patient care and program effectiveness. American Association of Cardiovascular and Pulmonary Rehabilitation www.aacvpr.org/Resources/ResourcesforMedicalProfessionals/tabid/108/Default.aspx
- Cardiopulmonary rehabilitation and cancer rehabilitation SAE in Archives of Physical Medicine and Rehabilitation, v87 March Supplement, 2006 Study Guide www.archives-pmr.org/issues

### **Chronic Pain**

- Acute Pain Management: Scientific Evidence by ANZCA Faculty of Pain Medicine 2005 2nd Edition
- Classification of Chronic Pain edited by H. Merskey and N. Bogduk (IASP Press: 2nd Edition, 1994)
- Management of Acute and Chronic Neck Pain An Evidence-based Approach by Nikolai Bogduk, Brian McGuirk (Elsevier 2006)
- Core Curriculum for Professional Education in Pain. Ed J Edmond Charlton, Seattle (IASP Press: c2005)
- Pharmacological Approaches to the Treatment of Chronic Pain edited by H. Fields and J. Liebeskind (IASP Press c 1994)
- Textbook of Pain edited by P. Wall and R. Melzack (Churchill Livingstone: 5th Edition, 2006)
- Bonica's management of pain. Ed John D Loeser, Philadelphia, PA: Lippincott Williams & Wilkins 2001 3rd Edition
- Chronic pain management: guidelines for multidisciplinary program development. Ed. Michael E Schatman, Alexandra Campbell, New York: Informa Healthcare c2007
- Clinical anatomy of the lumbar spine and sacrum. Nikolai Bogduk, New York: Churchill Livingstone, 2005 4th Edition
- Cousins and Bridenbaugh's neural blockade in clinical anaesthesia and pain medicine. Ed. Michael J Cousins, Phillip O Bridenbaugh. Philadelphia, PA: Lippincott Williams & Wilkins 2009 4th Edition
- Drugs for Pain by Howard S Smith 2003 Hanley & Belfus
- Fundamentals of musculoskeletal pain. Ed. Thomas Graven-Nielsen, Siegfried Mense, Seattle 2008
- Interventional pain management. Ed. Steven D Waldman. Philadelphia: W B Saunders 2001 2nd Edition
- Manage your Pain by Michael Nichols et al 2004 ABC Books

- Pain in older persons. Ed. Stephen J Gibson, Debra K Weiner. Seattle 2005
- Pain medicine: a comprehensive review. Ed. P Prithvi Raj. St Louis, Mo: Mosby 2003
- Travell & Simons' myofascial pain and dysfunction: the trigger point manual/David G Simons, Janet G Travell, Lois S Simons: Philadelphia, PA: Baltimore, MD: Lippincott Williams & Wilkins 1999 2nd Edition

- Clinical Journal of Pain
- Journal of Pain and Symptom Management
- Pain
- Acute Pain: International Journal of Acute Pain Management
- European Journal of Pain
- Journal of Pain: Official Journal of the American Pain Society
- Pain Research and Management: the Journal of the Canadian Pain Society

#### Websites

- Clinical update MJA 2004; 180 (2): 79-83
   www.mja.com.au/public/issues/180\_02\_190104/bog10461\_fm.html
- International Association for the Study of Pain iasp-pain.org
- International Spinal Intervention Society www.spinalinjection.com/
- Interventions in chronic pain management in Archives of Physical Medicine and Rehabilitation v89 March Supplement, 2008 Study Guide www.archives-pmr.org/issues

### **Developmental and Intellectual Disability in Adults**

#### Books

- Demystifying Syndromes, Griffiths, D. and King, R. (eds), NADD Press, 2004
- Management Guidelines Developmental Disability 2nd edition, Lennox, N (ed), Therapeutic Guidelines, Melbourne, 2005
- Management of Genetic Syndromes 2nd Edition, Cassidy, S. and Allanson, J. (eds), Wiley & Sons, New Jersey, 2005
- Medical care for children and adults with developmental disability. 2nd Edition, Rubin & Crocker (eds) Baltimore: Paul H Brookes Pub. 2006
- Pain in Children and Adults with Developmental Disabilities, Oberlander, T and Symons, F (eds), Paul H Brookes, Maryland, 2006
- Smith's Recognisable Pattern of Human Malformation 6th Edition, Jones, K. (ed), Elsevier Saunders, Pennsylvania, 2006
- Treating neurodevelopmental disabilities: clinical research and practice. Farmer, Donders & Warschausky (eds), New York: Guilford 2006

### Journals

- Disability and Rehabilitation
- Journal of Intellectual and Developmental Disability
- Journal of Policy and Practice in Intellectual Disabilities

- Journal of Intellectual Disability Research
- Journal of Applied Research in Intellectual Disabilities
- Journal on Developmental Disabilities

### Websites

- Australasian Society for the Study of Intellectual Disability www.ASSID.org.au
- Australian Association for Developmental Disability Medicine
   www.cddh.monash.org/aaddm.html
- Comprehensive Health Assessment Program CHAP Queensland Centre for Intellectual and Developmental Disability www.disability.qld.gov.au/support-services/providers/chap/
- Centre for Developmental Disability Health Victoria, School of Primary Health Care Monash University www.cddh.monash.org
- Centre for Developmental Disability Studies Faculty of Medicine. University of Sydney www.cds.med.usyd.edu.au/
- International Association for the Scientific Study of Intellectual Disability www.IASSID.org
- OMIM Online Mendelian Inheritance in Man www.ncbi.nlm.nih.gov/omim
- Queensland Centre for Intellectual and Developmental Disability (QCIDD), School of Population Health, University of Queensland www2.som.uq.edu.au/som/Research

### Articles

- Bittles, A. et al (2002): The influence of intellectual disability on life expectancy. J Geront 57: M470-M472
- Wallace, R.A, and Dalton, A.J. (2006): Clinicians guide to physical health problems of older adults with Down Syndrome. Journal on Developmental Disabilities 12: 1-79
- Whole volume Ageing and Disability. Journal of Applied Research in Intellectual Disabilities (2003) 12: 1-79

# Illness and Injury of the Child and Adolescent

- Muscle Disorders in Childhood by Victor Dubowitz. London 1995 2nd edition
- Orthopaedic Management in Cerebral Palsy by Eugene Bleck (Clinics in Developmental Medicine) London: Mac Keith Press 2007 2nd edition
- Orthopaedic Management in Childhood by Williams and Cole. London: Hodder Arnold, 1998 2nd revised edition
- Pediatric Rehabilitation edited by Gabriella Molnar, Michael A Alexander. Philadelphia: Hanley & Belfus, 1999 3rd edition
- Diseases of the nervous system in childhood. Ed Jean Aicardi, Martin Bax, Christopher Gillberg, London: Mac Keith Press 2009 3rd edition
- Fundamentals of pediatric orthopedics/Lynn T Staheli. Philadelphia, PA: Lippincott Williams & Wilkins, 2007 4th edition
- Head injury in children and adolescents/edited by Daune L MacGregor. Mac Keith Press 2007
- Movement disorders in children/Emilio Fernandez-Alvarez, Jean Aicardi, London: Mac Keith Press 2001

• Practice of pediatric orthopedics/Lynn T Staheli. Philadelphia, PA: Lippincott Williams & Wilkins, 2006 2nd edition

### Journals

- Developmental Medicine and Child Neurology
- Journal of Paediatric Surgery
- Developmental Neurorehabilitation (formerly Pediatric Rehabilitation)
- Journal of Child Neurology
- Journal of Children's Orthopaedics
- Journal of Paediatrics and Child Health
- Journal of Pediatric Orthopaedics

### Websites

- American Academy for Cerebral Palsy and Developmental Medicine (AACPDM) www.aacpdm.org
- CanChild Centre for Childhood Disability Research www.canchild.ca/en
- The Children's Hospital Westmead (NSW) Rehabilitation Department www.chw.edu.au/rehabilitation
- The Royal Children's Hospital Paediatric Rehabilitation Service (Vic) www.rch.org.au/rehab
- The Victorian Paediatric Rehabilitation Service www.health.vic.gov.au/vprs/index.htm

# Illness and Injury in Older People

### Books

- Essentials of Clinical Geriatrics by Robert L Kane, Ouslander and Abrass, McGraw-Hill Medical 6th edition 2009
- Fundamentals of geriatric medicine: a case-based approach/Ed. Rainier P. Soriano. New York: Springer 2007
- Geriatric Rehabilitation/guest editor Adrian Cristian. Philadelphia, PA: Saunders 2006
- Geriatrics at your fingertips/authors David B Reuben et al. New York: American Geriatrics, 2008
- The management of pain in older people/Ed. Pat Schofield. Chichester, England: John Wiley & Sons 2007
- Oxford handbook of geriatric medicine/Lesley K Bowker, James D Price, Sarah C Smith. Oxford: Oxford University Press 2006
- Rehabilitation of the older person: a handbook for the interdisciplinary team/edited by Amanda J Squires, Margaret B Hastings. Cheltenham: Nelson Thornes 2002 3rd Edition
- Who Can Decide? The six step capacity assessment process. Darzins P et al, Memory Australia Press 2000, ISBN 0-646-40343-5

### Journals

- Age and Ageing
- Australasian Journal on Ageing
- Clinics in Geriatric Medicine
- Journal of the American Geriatrics Society
- Topics in Geriatric Rehabilitation

#### Websites

- Australian Clinical Guidelines for Stroke Rehabilitation and Recovery 2005. Available from www.nhmrc.gov.au/publications/synopses/cp105syn.htm
- Scottish Intercollegiate Guidelines Network (SIGN). Management of hip fracture in older people (SIGN Publication No. 111). Available from www.sign.ac.uk/guidelines/fulltext/111/index.html
- Anonymous. Prevention of falls in older persons. American Geriatrics Society (2010) Available from www.americangeriatrics.org/health\_care\_professionals/clinical\_practice/ clinical\_guidelines\_ recommendations/2010/
- Australian and New Zealand Society for Geriatric Medicine (ASGM) www.anzsgm.org
- Rehabilitation and Older People. AFRM Special Interest Group www.racp.edu.au
- Rehabilitation and Older People. Ian D Cameron and Susan E Kurrle. MJA 2002 177 (7): 387-391. Full text available from www.mja.com.au/public/issues/177\_07\_071002/cam10158\_fm.html
- Assessing Fitness to Drive. National Road Transport Commission (Free Publication), Sept 2003, Chapters: 3.5.1 3.5.8(p22-23), 15:"Older drivers" p 76-78. ISBN 0-85588-507-6. Available from www.austroads.com.au
- Aging in the know: your gateway to health and aging resources on the web. American Geriatrics Society Foundation for Health and Aging (FHA)
   www.healthinaging.org/agingintheknow/
- Disability, Ageing and Carers, Australia. Summary of findings 2003 Australian Bureau of Statistics. (Cat. no. 4430.0) www.abs.gov.au
- Geriatric rehabilitation in Archives of Physical Medicine and Rehabilitation, V85 July Supplement, 2004 Study Guide
   www.archives-pmr.org/issues

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### **Lower Limb Amputation**

- Andrews K. Rehabilitation in Limb Deficiency 3. The Geriatric Amputee
- Arch. Phys. Med. Rehabilitation. 1996 : 77, S14-17
- Arlanta H. et al. Lower Limb Amputations in Southern Finland. Prosthetics & Orthotics Int. 1995: 19, 155-158
- Czerniecki J.M. Rehabilitation in Limb Deficiency 1.Gait and Motion Analysis
- Arch. Phys. Med. Rehabilitation. 1996: 77, 53-58
- Ebskov L.B. Relative Mortality in Lower Limb Amputees with Diabetes Mellitus. Prosthetics & Orthotics Int. 1996: 20, 147-152
- AAOS Atlas of orthoses and assistive devices/Lewis, Richard J Sr. Missouri: Elsevier Mosby 2008 4th edition
- Amputations and prosthetics: a case study approach/Bella J May. Philadelphia, PA: F A Davies 2002 2nd edition
- Atlas of amputations and limb deficiencies: surgical, prosthetic and rehabilitation principles/American Academy of Orthopedic Surgeons. Rosemont, IL: American Academy of Orthopedic Surgeons 2004 3rd edition
- Orthotics and prosthetics in rehabilitation/edited by Michelle M Lusardi, Caroline C Nielsen. St. Louis, Missouri: Saunders/Elsevier 2007 2nd edition
- A primer in limb prosthetics by A Bennett Wilson Jr, Springfield III: C C Thomas 1998

- Prosthetics and orthotics/Donald G Shurr, John W Michael. Upper Saddle River, NJ: Prentice Hall 2002 2nd edition
- Prosthetics and orthotics: lower limb and spine/Ron Seymour. Philadelphia: Lippincott Williams & Wilkins 2002
- Prosthetics and patient management: a comprehensive clinical approach/edited by Kevin Carroll, Joan Edelstein. Thorofare, NJ: SLACK Inc 2006

- Journal of Rehabilitation Research and Development [formerly Bulletin of Prosthetic Research]
- JPO Journal of Prosthetics and Orthotics
- Prosthetics and Orthotics International

#### Websites

- Rehab Tech: Rehabilitation engineering at Monash University www.monash.edu.au/rehabtech/
- The National Centre (Australia) for Prosthetics and Orthotics, Latrobe University www.latrobe.edu.au/ncpo/
- New South Wales Artificial Limb Service (NSW ALS) rehabtech.eng.monash.edu.au/nsw-als/resource.htm
- Limb deficiency and prosthetic management in Archives of Physical Medicine and Rehabilitation, V87 March Supplement, 2006 Study Guide www.archives-pmr.org/issues

Organisations associated with Prosthetics & Orthotics

- International Society for Prosthetics and Orthotics (ISPO) www.ispo.ws/
- American Academy of Orthotists and Prosthetists www.oandp.com/
- An on-line version of JPO starting from 1989 (a JAVA compatible browser is required to use the search engine) www.oandp.org/jpo/
- The ISPO Canada website www.ispo.ca/default.asp
- The ISPO UK website www.ispo.org.uk/

### Courses

• Prosthetics and Orthotics Courses run in NSW by UNSW and in Victoria by RehabTech

### Lymphoedema and Related Disorders

- Lymphoedema Frame work: Best Practice for the Management of Lymphoedema. International Consensus, London MEP Ltd 2006
- Review of Current Practice and Future Direction in the Diagnosis, Prevention and Treatment of Lymphoedema in Australia. February 2004. Report to the Australian Health Ministers Advisory Council
- Lymphoedema Edited by Twycross Jones and Todd. Ausmed Publications 2003
- Textbook of Lymphoedema Foeldi, Foeldi and Kubrik Urban and Fisher 2007

# **Musculoskeletal Medicine**

There is no single journal or textbook which provide adequate coverage of diagnosis and/or rehabilitation management of the wide range of musculoskeletal complaints which may be encountered in the practice of musculoskeletal rehabilitation. Some areas, such as fibromyalgia and myofacial pain, and the management of acute and chronic low back pain, remain under vigorous scientific debate. Read widely beyond the scope of the following lists, and review evidence-based articles appearing in major journals.

- Appley's System of Orthopaedics and Fractures/Louis Solomon. London: Arnold 2001 8th edition
- Clinical Anatomy of the Lumbar Spine and Sacrum by Bogduk and Twomey (Churchill Livingstone: 2005 4th Edition)
- Clinical Orthopaedic Examination by McCrae. Edinburgh: Churchill Livingston, 2004 5th edition
- Clinical Orthopaedic Rehabilitation S. Brotzman (Mosby 2003 2nd edition)
- Clinical uses of botulinum toxins/Edited by Anthony B Ward & Michael P Barnes. Cambridge: Cambridge University Press 2007
- Copeman's Text Book of Rheumatic Diseases/Editors J T Scott, W S C Copeman. Edinburgh: Churchill Livingstone: 6th Edition, 1986)
- Essentials of physical medicine and rehabilitation: musculoskeletal disorders, pain and rehabilitation. Edited by Walter R Fontera, Julie K Silver, Thomas D Rizzo Jr. Philadelphia, PA: Saunders/Elsevier 2008 2nd edition
- Exercise in rehabilitation medicine, Walter R Fontera. Champaign, IL: Human Kinetics 2006 2nd edition
- Evaluation of orthopaedic and athletic injuries by C Starkey and J L Ryan 2002 F A Davis
- Hand and upper extremity rehabilitation: a practical guide. Ed Susan L Burke [et al] St Louis, Mo: Elsevier Churchill Livingstone: 3rd Edition, 2006
- Handbook of orthopaedic rehabilitation/s Brent Brotzman, Kevin E Wilk. Philadelphia, PA: Mosby 2007 2nd edition
- Kinesiology and Applied Anatomy by Rasch and Burke (Lee and Febiger: 7th Edition, 1989)
- Managing Low Back Pain edited by Kirkaldy-Willis and Burton (Churchill Livingstone: 4th Edition, 1999)
- Measurement of joint motion: a guide to goniometry/Cynthia C Norkin, D Joyce White. Philadelphia: F A Davis 2009 4th edition
- Medical Management of Acute and Chronic Low Back Pain: An evidence based approach by N Bogduk & B McGuirk 2002 Elsevier
- Muscle Testing and Function by Kendall, Kendall and Wadsworth (Waverly Press) 1993 4th edition
- Musculoskeletal physical examination: an evidence based approach/Gerard A Malanga, Scott F Nadler. Philadelphia, PA: Elsevier Mosby 2006
- New avenues for the prevention of chronic musculoskeletal pain and disability by S J Linton 2002 Elsevier
- Orthopedic physical assessment/David J Magee. St Louis, Mo: Saunders/Elsevier 2008 5th edition
- Orthopaedic clinical examination by Joshua Cleland 2005 Saunders
- Physical examination of the spine and extremities/Stanley Hoppenfeld. New York: Appleton-Century-Crofts 1976
- Pocket Guide to Musculoskeletal Assessment by Richard E Baxter 2003 Saunders
- Practical Orthopaedic Medicine by B Corrigan and D Maitland (Butterworths) 1983
- Scientific foundations and principles of practice in musculoskeletal rehabilitation/editors David J Magee, James E Zachazewski, William s Quillen. St Louis, Mo: Saunders/Elsevier 2007
- Sports Injury: Assessment and Rehabilitation by David C. Reid. New York: Churchill Livingston 1992

- Therapeutic Exercise by John V Basmajian. Baltimore: Williams & Wilkins 1990 5th edition
- Upper motor neurone syndrome and spasticity: clinical management and neurophysiology/edited by Michael P Barnes & Garth R Johnson. Cambridge University Press 2008 2nd edition
- Whiplash (Ed. Malanga) 1998 by Harley & Belfus 2002

- Clinics in Sports Medicine
- Journal of Bone and Joint Surgery (American and British)
- Orthopaedic Clinics of North America
- Radiologic Clinics of North America

#### Websites

- Bone and Joint Decade 2000-2010 for prevention and treatment of musculoskeletal disorders www.boneandjointdecade.org/
- Industrial medicine and acute musculoskeletal rehabilitation in Archives of Physical Medicine and Rehabilitation, v88 March Supplement, 2007 Study Guide www.archives-pmr.org/issues
- Neuromuscular rehabilitation and electrodiagnosis rehabilitation of orthopedic and rheumatologic disorders in Archives of Physical Medicine and Rehabilitation, v86 March Supplement, 2005 Study Guide www.archives-pmr.org/issues

### **Neurological Disease**

- Case studies in neurological rehabilitation (Tarek) Cambridge University Press 2008
- Cognitive and behavioral rehabilitation: from neurobiology to clinical practice. Jennie Ponsford. New York; London: Guilford 2004
- Cognitive assessment for clinicians. John R Hodges. Oxford University press 2007
- Cognitive neurorehabilitation: evidence and application. Edited by Donald T Stuss et al. Cambridge University Press 2008 2nd edition
- Neurological rehabilitation edited by Darcy Ann Umphred. St Louis: Mosby 2007 5th edition
- Neurological rehabilitation of multiple sclerosis Edited by Alan J Thompson. Abingdon: Informal Healthcare 2006
- Neuroscience: fundamentals for rehabilitation/Laurie Lundy-Ekman. St Louis, MO: Saunders 2007 3rd edition
- Recovery after stroke/edited by Michael P Barnes et al. Cambridge University Press 2005. Paperback March 2009
- Severe and complex neurological disability: management of the physical condition. Pauline M Pope. Edinburgh: Butterworth-Heinemann/Elsevier 2007
- Stroke: practical management/C Warlow et al. Malden, Mass: Blackwell Pub 2008, c2007 3rd edition
- Stroke recovery and rehabilitation edited by Joel Stein et al. New York: Demos Medical 2009
- Stroke Rehabilitation: a collaborative approach. Edited by Robert Fawcus. Oxford; Malden, Mass: Blackwell Science 2000
- Stroke Rehabilitation: a function based approach edited by Glen Gillen et al. St Louis, Mo: Mosby 2004 2nd edition
- Stroke Rehabilitation, Kaplan & Cerullo. Boston: Butterworths 1986
- Vestibular rehabilitation, Susan J Herdman. Philadelphia: F A Davis 2007 3rd edition

- Wheelchair selection and configuration, Rory A Cooper. New York: Demos 1998
- Wheelchairs: A Prescription Guide, A Bennett Wilson (Demos Publications) 1992

- Journal of Cognitive Rehabilitation
- Neurorehabilitation
- Neurorehabilitation and Neural Repair
- Cerebrovascular Diseases
- International Journal of Stroke
- Journal of Stroke and Cerebrovascular Diseases
- Stroke
- Topics in Stroke Rehabilitation

### Websites

- Clinical guidelines for stroke rehabilitation and recovery/National Stroke Foundation 2005 www.nhmrc.gov.au/publications/synopses/cp105syn.htm
- National Stroke Foundation www.strokefoundation.com.au
- Congenital and acquired brain injury in Archives of Physical Medicine and Rehabilitation, v89 March Supplement, 2008 Study Guide
   www.archives-pmr.org/issues
- The Evidence-Based Review of Stroke Rehabilitation (EBRSR) www.ebrsr.com
- Stroke rehabilitation in Archives of Physical Medicine and Rehabilitation, v86 Dec Supplement, 2005 Study
  Guide

www.archives-pmr.org/issues

 Stroke Rehabilitation and neurodegenerative disorders in Archives of Physical Medicine and Rehabilitation, v85 March Supplement, 2004 Study Guide www.archives-pmr.org/issues

### **Occupational Injury**

- Back Pain in the Workplace: Management of Disability in Non-specific Conditions. A Report of the Task Force on Pain in the Workplace, the International Association for the Study of Pain. IASP Press. Seattle. 1995
- Disability evaluation. Stephen Dementer editor. Mosby 2003 2nd edition
- Fitness for Work: the medical aspects. Edited by R A F Cox. Oxford University Press 2000 3rd Edition
- Guide to the evaluation of functional ability: how to request, interpret and apply functional capacity evaluation. Edited by Genovese and Galper. American Medical Association 2009
- Guides to the evaluation of disease and injury causation. Edited by Melhorn and Ackerman. American Medical Association 2008
- Occupational Low Back Pain: Assessment, Treatment and Prevention. M.H. Pope, G.B.J. Anderson, J.W Frymoyer, D.B. Chaffin. Mosby. 1991
- Occupational Medicine. Zenx, Dickerson & Horvath. Mosby. 1994. (3rd Ed)

- Occupational Rehabilitation: Guidelines on Principles and Practice. Australian College of Rehabilitation Medicine and Australian College of Occupational Medicine. 1987. (AFRM Office)
- Principles and Practices of Disability Management in Industry. Shrey & Lacerte. G.R. Press. Florida. 1995
- Vocational Rehabilitation/Jain Holmes. Oxford: Blackwell 2007

• Journal of Occupational Rehabilitation

### Websites

- Acute low back injuries. Workcover South Australia www.workcover.com/Treat/treathome/Commoninjuries/Acutelowbackpaininjuries.aspx
- Assessing fitness to drive www.austroads.com.au/aftd/index.html
- Clinical framework for the delivery of health services. Vic, WorkCover www.worksafe.vic.gov.au/
- Industrial medicine and acute musculoskeletal rehabilitation in archives of Physical Medicine and Rehabilitation v88 March Supplement, 2007 study guide www.archives-pmr.org/issues
- Medical Practitioner's Guide to the WorkCover. There are a number of published Codes of Practice for various industries. Trainees seeking specific information are advised to contact the relevant industry council.
   For example: www.workcover.nsw,gov,au and www.riskman.unsw.edu.au/ohs/
- Policy & Guidelines for the Management of Occupational Rehabilitation in NSW Public Health Facilities. 1997 www.health.nsw.gov.au/policies/pd/2005/pdf/PD2005\_162.pdf
- Realising the Health Benefits of Work. Position statement of the Australasian Faculty of Occupational and Environmental Medicine (AFOEM) of the Royal Australasian College of Physicians (RACP). afoem.racp.edu.au/page/media-and-news/realising-the-health-benefits-of-work

# Spinal Injury and Disease

### Core Books

- ABC of Spinal Cord Injury, David Grundy and Andrew Swain. 4th edition. BMJ Publishing, 2002
- Rehabilitation Medicine. Principles and Practice (2005) edited by Joel De Lisa, Braddom, or similar comprehensive rehabilitation textbooks relevant chapters of e.g. SCI, bladder, bowel, pressure ulcer, spasticity, pain, psychology, sexuality, orthotics, etc.

### **Comprehensive Books**

- Spinal Cord Medicine: Principles and Practice. by Vernon W Lin, Diana D Cardenas, Nancy C Cutter, Margaret C Hammond, Laurie B.Lindblom, Inder Perkash, Robert Waters, Robert M Woolsey. Demos Medical 2003
- Spinal Cord Medicine by Steven Kirshblum, Denise Campagnolo, Joel A. De Lisa Lippincott Williams and Wilkins. 2002

### (The above 2 textbooks are very useful comprehensive SCI references)

• Diseases of the Spine and Spinal Cord. TN Byrne, EC Benzel and SG Waxman. Oxford University Press (January, 2000)

### Specialist Textbooks

These are suggested for a much greater detail of understanding of specific aspects of SCI medicine:

- The Child with a Spinal Cord Injury. American Academy Orthopaedic Surgeons. Shriners Hospitals for Crippled Children Symposium (Corporate Author), Randal R. Betz & M. J. Mulcahey Editors. 1996
- Guides 6th impairment training workbook: spine. Marjorie Eskay-Auerbach, James B Talmage [Chicago III.] American Medical Association 2009
- Spinal Cord Injury Pain: Assessment, Mechanisms, Management. Progress in Pain Research and Management, Vol. 23, edited by K. J. Burchiel and R. P. Yezierski, Seattle: IASP Press, 2002
- Spinal Cord Injuries: Psychological, Social and Vocational Adjustment by Trieschmann. (New York: Demos, 2nd edition, 1988)
- American Psychological Association's Handbook of Rehabilitation Psychology. R. Frank & T. Elliott Eds. 2000
- Management of High Quadriplegia, editors: Gale G. Whiteneck et al. Demos, 1989. (Comprehensive neurologic rehabilitation; v. 1)
- The rehabilitation of people with spinal cord injury. Shanker Nesathural. Ed Malden MA: Blackwell Science 2000 2nd Edition
- Rehabilitation of the spine: a practitioner's manual. Ed Craig Liebenson. Baltimore, MD: Lippincott Williams & Wilkins, 2007
- Spinal cord injury rehabilitation. Ed Edelle C.Feld-Fote. Philadelphia, PA: F A Davis 2009
- Spinal Cord Injury: Medical Management & Rehabilitation. G Yarkony (Ed). Rehabilitation Institute of Chicago Procedure Manual. Aspen Publishers, Gaithersburg, Maryland. 1994
- Spinal Cord Injury: Clinical Outcomes from the Model Systems, edited by Samuel L. Stover, Joel A. Delisa, Gale G. Whiteneck. Aspen, 1995

### Journals

As with all aspects of health care, new research is continually being published. It is important is develop strategies to keep up to date and search the literature, especially using the internet, for new relevant information on topics of interest.

### **Core Journals**

- Journal of Spinal Cord Medicine
- Spinal Cord (formerly Paraplegia)

### Additional Useful Journals

- Topics In Spinal Cord Injury Rehabilitation
- SCI Nursing
- Spine

### Websites

- International Spinal Cord Society (ISCoS) www.iscos.org.uk
- American Spinal Injury Association
   www.asia-spinalinjury.org
- Spinal cord injury in Archives of Physical Medicine and Rehabilitation, v88 March supplement, 2007 Study Guide (Free full text available from www.archives-pmr.org/issues
- The Spinal Cord Injury Rehabilitation Evidence www.icord.org/scire/home.php

# Traumatic Brain Injury

### Books

- Acquired Brain Injury: an integrative neurorehabilitation approach/Elbaum & Benson (eds) New York, Springer 2007
- Brain Injury medicine: principles and practice. Edited by Nathan D Zasler et al. New York: Demos 2007
- Community Integration following TBI. Kreutzer and Wehmann. Baltimore: Brookes, 1990
- Medical Rehabilitation of Traumatic Brain Injury, Ed. L. Horn and N. Zasler, Publ. Hanley and Belfus Inc 1996. Distributed in Australia by Mosby
- Mild traumatic brain injury and post concussion syndrome: the new evidence base for diagnosis and treatment/ Michael A McCrea. New York: Oxford University Press 2008
- Psychological approaches to rehabilitation after traumatic brain injury. Tyerman & King (eds) Oxford: BPS Blackwell 2008
- Recovery After Traumatic Brain Injury. Edited by B. Uzzell and H. Stonnington. Lawrence Erlbaum Associates, 1996
- Rehabilitation for traumatic brain injury. Walter M High et al (eds) Oxford University Press 2005
- Rehabilitation of people with traumatic brain injury. Buck H Woo, Shanker Nesathurai (eds) Malden. Mass: Blackwell Science 2000
- Rehabilitation of the Adult and Child with traumatic brain injury by Rosenthal, Griffith Bond and Miller. Ed3 Philadelphia: Davis 1999
- Textbook of traumatic brain injury. Silver, McAllister, Yudofsky (eds) Washington DC: American Psychiatric Pub 2005
- Trauma Rehabilitation edited by Lawrence R Robinson Philadelphia, PA: Lippincott Williams & Wilkins 2006
- Traumatic Brain Injury: rehabilitation for everyday adaptive living. Jennie Ponsford. Hove, Eng: Lawrence Erlbaum Assoc. 1995
- Traumatic Brain Injury Services, Treatments and Outcome. Edited by M.A. Chamberlain, V. Neumann and A. Tennant. Chapman and Hall Medical, London, 1995

### Journals

- Brain Injury
- Journal of Head Trauma Rehabilitation
- Journal of Neurotrauma

### Websites

 Archives of Physical Medicine and Rehabilitation, including 1998 Study Guide Vol. 79 No 3 Supp. 1. March 1998

www.archives-pmr.org/issues

- The Evidence-Based Review of Moderate to Severe Acquired Brain Injury (ABIEBR) is a joint project to develop an evidence-based review of the literature for rehabilitation or rehabilitation-related interventions for ABI www.abiebr.com
- Neuroplasticity and brain imaging research: implications for rehabilitation in Archives of Physical Medicine and Rehabilitation, v87 Dec Supplement, 2006
   www.archives-pmr.org/issues
- Psychological database for Brain Impairment Treatment Efficacy www.psycbite.com
- Traumatic Brain Injury. New Zealand Guidelines 2007 www.nzgg.org.nz/guidelines/0129/pdf\_final.pdf

# **Upper Limb Amputation**

Book

• A Review of the Management of Upper Limb Amputees: L E Jones & J Davidson. Critical Reviews in Physical and Rehabilitation Medicine, June, 1997

